erosion. This supposition was confirmed when units on the edge of the field were excavated.

Predictive model for prehistoric component

The Mudstone Branch site lies on the northern edge of the area studied by Custer and Galasso (1983) in their survey of the St. Jones and Murderkill drainages. They divided the drainages into four zones, beginning with the bayside marshes (I), the inland side of the marsh zone (II), the mid-drainage (III), and the drainage divide transition zone (IV). This site lies on the edge of the third and fourth zones. Paleo period sites were found exclusively in the third and fourth zones. For all prehistoric periods, "procurement" sites dominated the inventory in these zones.

Thomas, Griffith, Wise, and Artusy (1975), in their analysis of the Delaware coastal plain, postulated that prehistoric people of the Archaic and Woodland periods would have used similar interior woodland micro-environments most intensively during the fall nut-gathering season and during the winter deer-hunting season. To tap these resources, they could have built semi-permanent base camps on sites like this one. In his summary of early and middle Woodland settlement patterns, Gardner (1982) visualized small groups seasonally breaking away and moving to the interior from larger sedentary base camps in or near the tidal zone.

Thomas (1974, 355) identified this reach of Mudstone Branch as an area with high salvage priority because of its cultural importance and the level of development present.

DESCRIPTION OF WORK

Boundaries and physical features

The site is bounded on the west by Saulsbury Road, on the east and north by cultivated fields, and on the south by a former borrow pit that is now woods.

The largest manmade feature is a barn or garage built during the twentieth century. The cut of Saulsbury Road is reached by a deep driveway cut that leads directly to the garage. An older driveway, probably truncated by the 1940 road cut, is evident on the ground and in the topographic map.

The grid was laid out along a compass north axis which cut roughly through the diagonal of the house mound. It was staked at 25-foot intervals. The east-west base line was turned with a transit from a point in the yard and also staked at 25-foot

intervals. All other points within the grid were determined by triangulation from these base lines. The grid was tied to a gas pipeline sign and a utility pole that appear on DelDOT plots of the site.

An arbitrary zero point was established 200 feet south and west of the base line intersection, placing the entire site in the northeast quadrant of an imaginary larger grid. The intersection of the base lines therefore is at point 200 north, 200 east. In the artifact catalogue, all units are identified in space by the location of their southwest corners as counted from the arbitrary zero point.

Because no firm vertical control was available, an arbitrary 100-foot elevation was established for topography. This was the level of the plane table set up at the intersection of the base lines. It lies about 45 feet above sea level. Vertical measurements within units are taken from arbitrary level lines tied to the actual ground surface at the highest corner of the unit.

Cultivated flora

The investigators noticed a large number of domestic ornamental plants on the site when they visited it in the early summer of 1983. The plants included species which seem to be typical of the ornamental perennials that were popular in central Delaware around the turn of the twentieth century.

Because the locations of gardens, trees, and shrubbery often complement the use of yard and farmstead areas, the investigators took a plant census and mapped the locations of domestic plants before the site was mowed. The first plant census was taken in the late Spring, and supplementary observations were made throughout the project. Twenty-eight species of either domesticated native plants or non-native decorative plants were noted. Some, notably blackberries, raspberries, and multiflora rose, may have been brought in by birds. Others, particularly shrubbery, seem to have been deliberately planted by residents of the site.

The plant census was taken too late in the year to discover daffodils, usually considered the most common surviving domestic planting. Also, there were no mature maples and no recognizable maple stumps on the site. This was surprising considering that both swamp and silver maples are among the most common domesticated native species in the Middle Atlantic coastal region.

TABLE 2

Domestic Plants, Mudstone Branch Site

Herbaceous plants:

Hybrid Daylilies (Species unidentified)
Periwinkle (Vinca Minor)
Decorative grass, "Pampas grass"
Decorative grass, "Quaking grass"
White Yarrow
Pink Yarrow
Yucca
English Ivy
Prickly Pear cactus
* Wild or reverted pinks
* Hairy Vetch
* False Indigo (Baptisia Tinctoria)
Cannabis sativa (apparently a current-season introduction)

Shrubby Plants:

Lilacs
Flowering Quince
Rose of Sharon
"Red Twig" dogwood
Spirea varieties
* Privet
* Domestic blackberries
* Red raspberries
* Multiflora roses

Trees:

Kieffer Pear
Pine
Spruce
Locust
Dogwood
Wild Cherry
Walnut, English and Black

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* Species possibly introduced from other nearby domestic or agricultural sites by natural forces.

FIGURE 8
Site plan, showing cultivated flora found in 1983

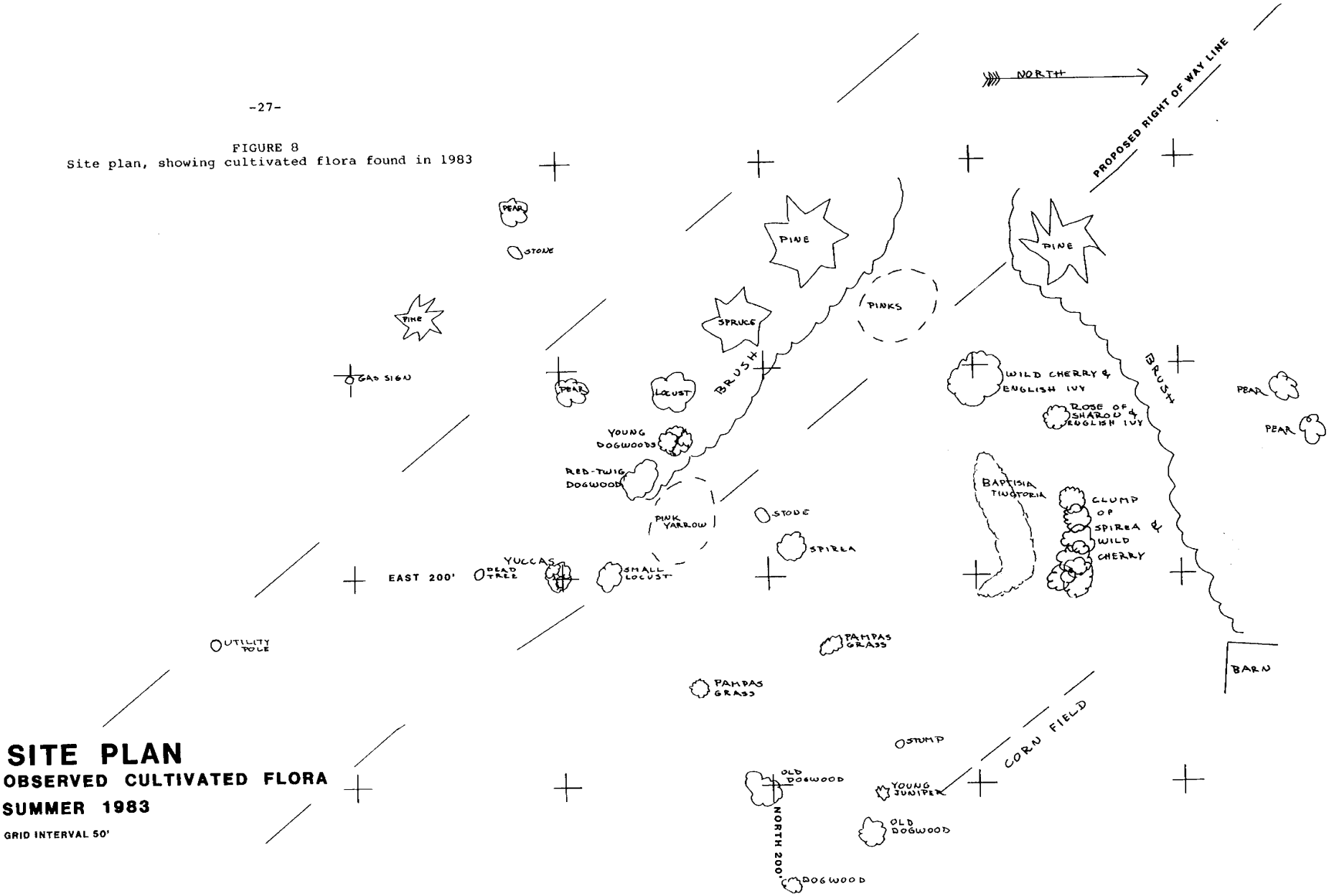


FIGURE 9
Site plan, showing observed cultural features

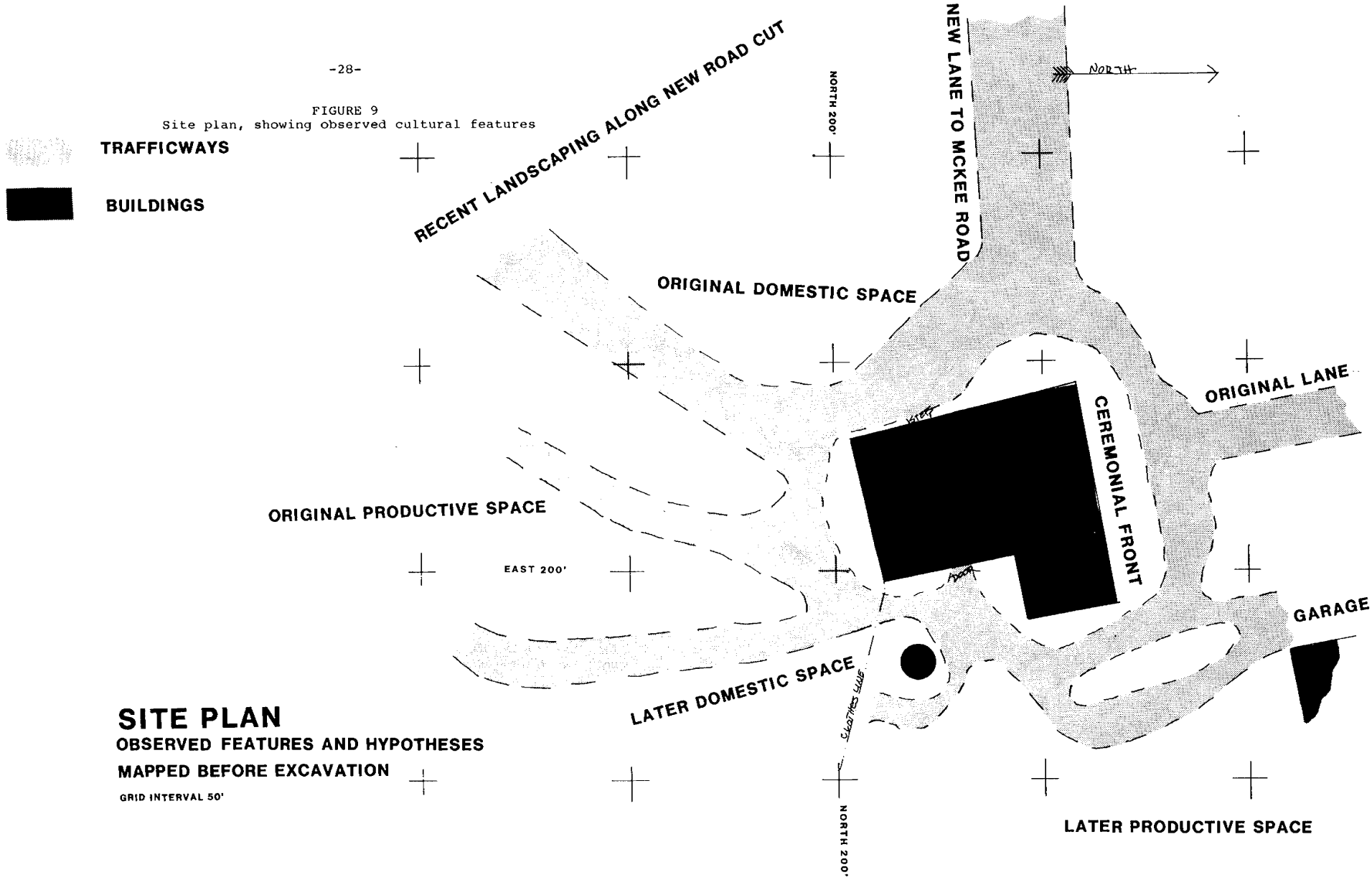


FIGURE 1Ø
Topographic map of the farmstead

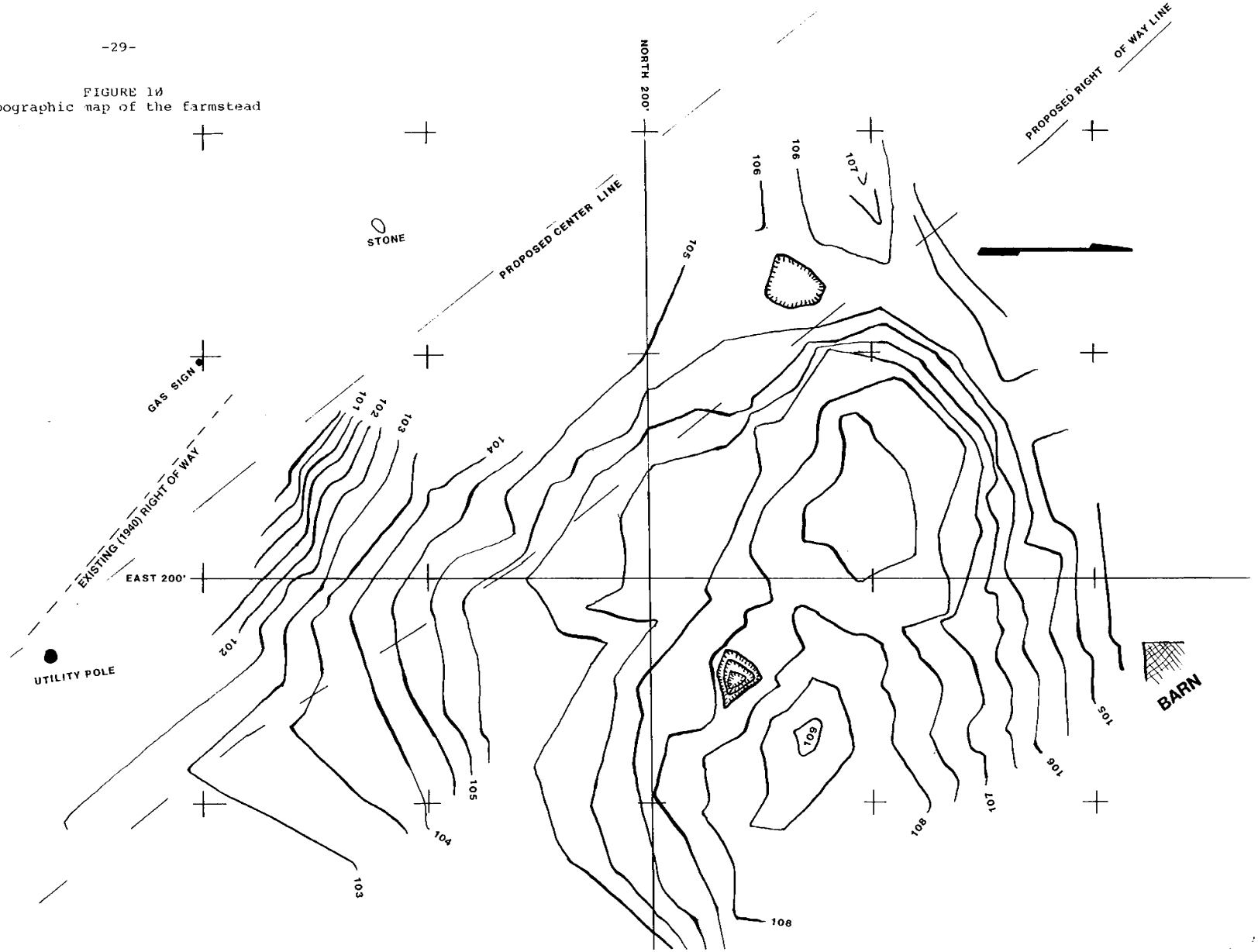
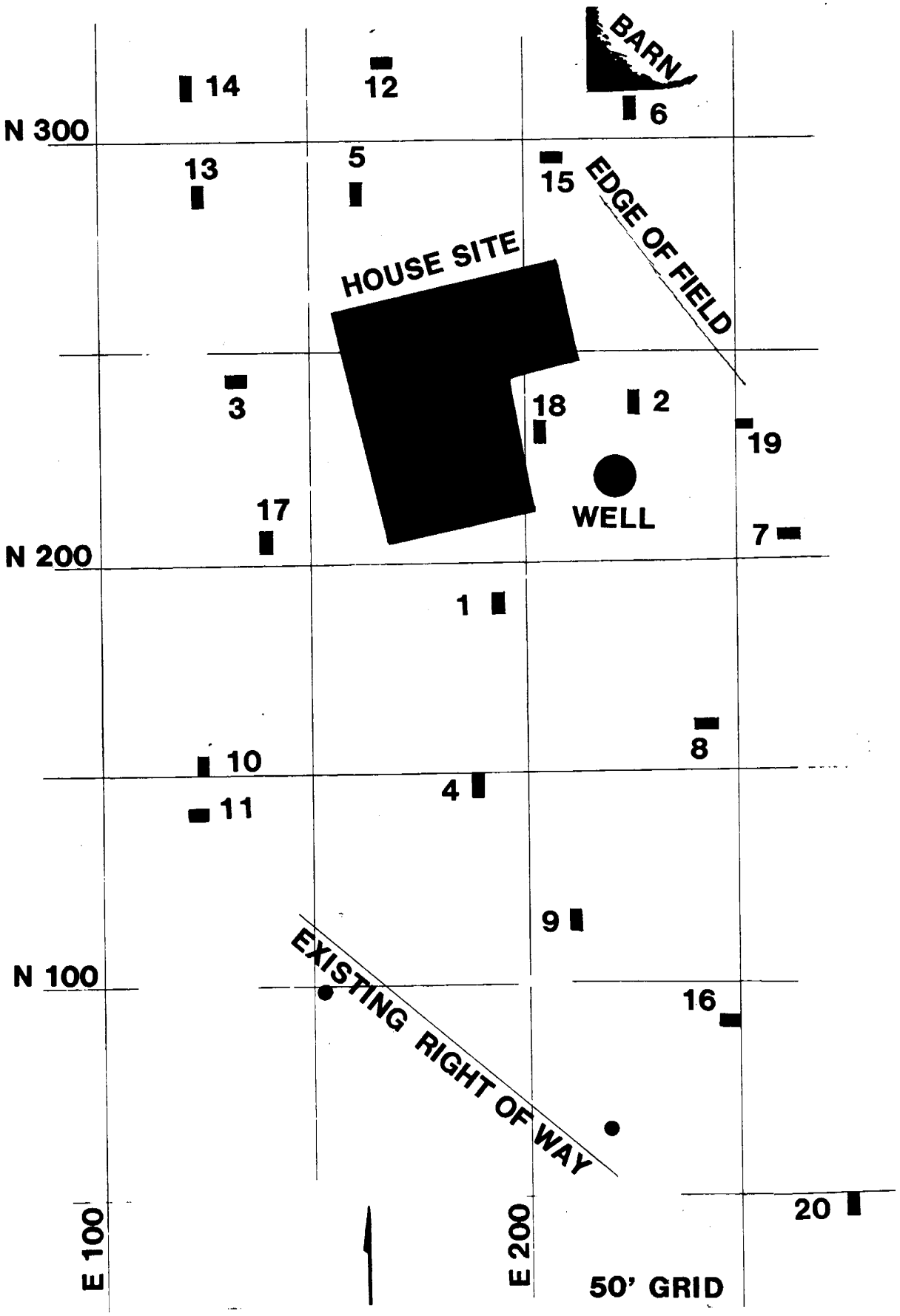


FIGURE 11
Excavation plan, showing excavated units



Gross cultural features

Before choosing excavation units, the investigators prepared a topographic map of the site using six-inch contour intervals. The location and level of all noticeable surface features were measured from a single point using a plane table and alidade provided by the University of Delaware Department of Geology. Interpolation across the legs of the resulting spiders provided cross-checks against the field measurements, and prevented the possible accidental distortion of the map caused by use of a single instrument position.

The investigators hoped that close topography would reveal details of yard use. Sandy soil wears easily, and does not always exhibit clear natural strata. Thus, worn surfaces, washes, mounds, and trafficways were deemed to be possibly of extraordinary importance in the interpretation of this site. (figure 11)

The investigators were interested in testing the accuracy and utility of close topography as a predictive tool. By correlating the locations of worn areas in the farmyard and the locations of the domestic plantings, it was possible to produce a map of the yard showing both the house location and trafficways around the yard (figure 7). The only known photograph of the house (to date) (figure 5) provided identification of the large hole on the topo as a twentieth-century well, and also the location for the clothesline. Furthermore, one of the spirea bushes noted in the plant census appears along the back end of the back wing of the house, and helped to provide location for the house foundation.

Excavation Narrative

Each unit was drawn in plan and profile, but only the most illustrative drawings are reproduced here. The complete set of drawings, together with complete field notes, are deposited at Island Field. Each unit was trowelled to obvious sterile subsoil, and beyond the last cultural remains. In most cases, the bottom was verified by shovel testing into the sterile substratum; these shovel tests are not illustrated here. The excavation register is reproduced as part of the site drawings accompanying the text. A detailed artifact inventory will be found in appendix 4.

Unit #1, 190 - 195 N, 195 - 197.5 E

The first level consisted of a dense mat of vegetal remains, vines, and roots. It contained pieces of recent sawed lumber. The surface and the root mat were numbered ER1. This same convention was followed throughout the site; units labelled with an integer without a suffix are unstratified.

Directly below the root mat was a layer of grey, dry, powdery sand. The actual ground surface was marked by a thin layer of dark grey humus, and the presence of grass and honeysuckle root crowns. No features were visible in the ground surface. The broken end of a 1" angle iron projected into the unit about two inches. It was located but not removed. This level received the designation ER1. It overlay a level of orange, clayey packed sand.

The first feature, ER1B, was a lens of orange clayey sand with tiny fragments of charcoal mixed in. It was located in the northwest corner and along the west edge of the unit. ER1C was a second lens of similar but softer and less orange sand and clay. It also contained tiny bits of brick and considerably more charcoal. It lay in the southeasterly corner of the unit. ER1D was another lens of sand located in the northeasterly corner of the unit. It was virtually identical to ER1B in composition. Only a narrow zig-zag line of brown sand, ER 1F, separated B and D.

A mole dug a tunnel across the unit overnight, through the old topsoil under the orange clayey sand fill (1B).

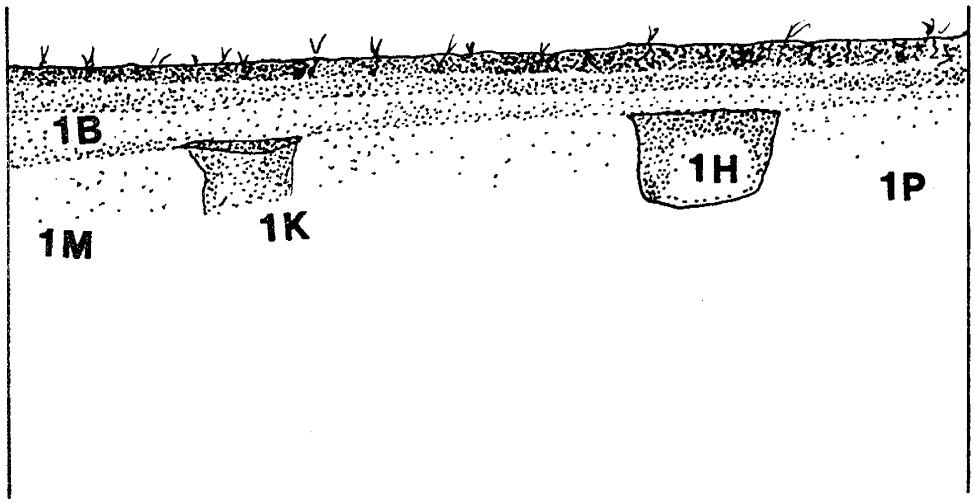
Feature 1B was removed with a trowel. Because of 1B's distinct color and texture, it was possible to remove the mole-disturbed part along with the rest of that feature. The soil within the feature was sand mixed with clay and some small bits of gravel. It also contained some small bits of charcoal. It was orange in color, and it overlay a level of brown sand. It was found to extend the length of the west side of the unit, merging into 1C at the unit's south end. The difference in texture and compactness between 1B and the underlying soil was striking.

FIGURE 12
Unit 1

1	Root mat, loose powdery sand
1A	Root-disturbed gray sandy soil
1B	Orange clay-sand lens
1C	Orange clay-sand lens
1D	Orange clay-sand lens
1E	Very recent mole tunnel disturbance
1F	Old topsoil, gray clay-sand
1G	Lower grey clay-sand soil horizon
1H	Rootmold
1J	Rootmold
1K	Rootmold
1L	Rootmold
1M	Mottled orange sandy subsoil
1N	Possibly a rootmold
1O	Rootmold
1P	Subsoil, undisturbed
1Q	Linear feature, probably a rootmold

scale in feet

1 2 3 4 5 6 7



WEST FACE OF UNIT 1

Feature 1C was removed next. Its soil was very similar to that of 1B, but it contained noticeably more ash. A thin layer of sandy clay seemed to connect the two features. The soil below this feature was also brown sand, which was continuous with the brown sand under 1B. This layer appeared to be an old topsoil horizon.

It was not possible to distinguish the mole-disturbed parts of 1C or the old topsoil, 1F, from each other, so part of the molehill within 1C was removed separately. It received the designation 1E.

Feature 1D was removed next. Its contents were virtually identical with 1B, but it was discontinuous with both that feature and with ER1C. The same brown loamy sand which lay below the other features lay below this one.

The level of brown loamy sand, ER1F, contained no surface features other than the mole tunnel, ER1E. The soil contained a considerable amount of ashy dirt; flakes and small lumps of charcoal; tiny fragments of brick; and some pebbles which showed evidence of burning. It also contained a considerable portion of small, highly fragmented artifacts which were all concentrated within one to two inches of the top of this level.

Immediately below the concentration of artifacts was a level of marginally sandier soil. Except for the artifact component, it was virtually identical to and apparently continuous with ER1F; there was no distinguishing surface between them. This level was named ER1G.

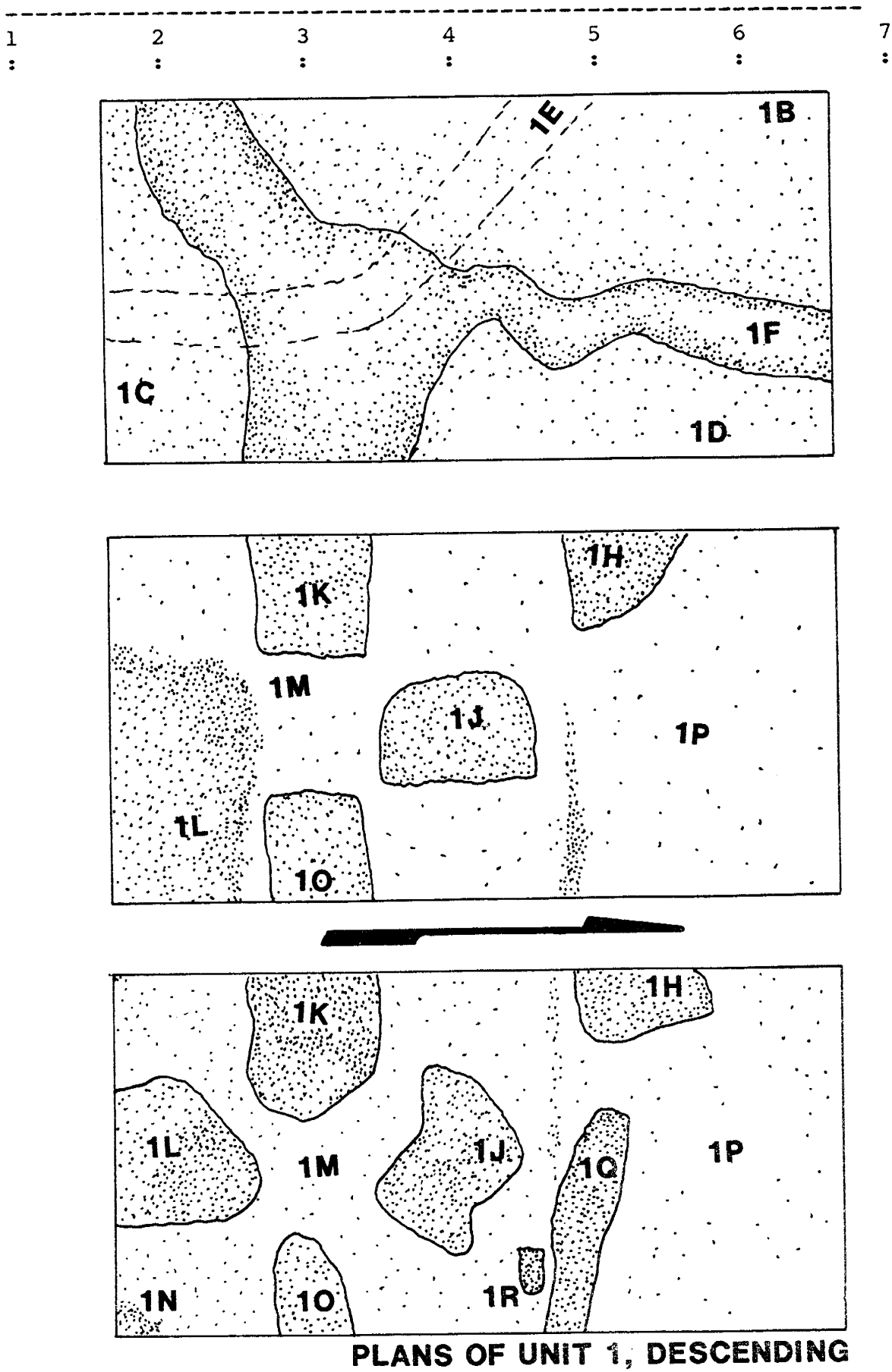
The subsoil stratum lay below ER1G. It was a mixture of sand and clay, orange in color, without loam but with a scattering of charcoal and a few prehistoric stone chips on top. A number of features were visible. The soil at the north end of the unit was slightly softer and sandier than the rest. The main body of the subsoil layer was numbered ER1M, and the softer soil at the north end of the unit was numbered ER1P. The features were numbered ER1H,J,K,L,N,O,Q, and R.

All the features contained soil similar to the old topsoil: brown sandy loam containing flakes of charcoal and tiny fragments of brick. Feature 1L seemed to be a large, amorphous depression at first, but cleaning of the unit floor revealed that it was actually three features (ER1L, N, and O). The soil in these features was somewhat ashier than that in the other features, reflecting the condition of the old topsoil above. ER1L contained a large fragment of burned brick.

These features were excavated in sequence, with the exception of ER1N. Features ER1H,J,K,L, and O all turned out to be root holes. They lay on approximately eighteen-inch centers. Their bottoms were irregular, which is typical of planting holes. These

FIGURE 13
Unit 1, continued

scale in feet



PLANS OF UNIT 1, DESCENDING

features contained very few artifacts. Because ER1N extended only three inches along the unit's west wall and about an inch and a half along the south wall, and seemed to be in line with the other features, it was not excavated.

The remaining two features, ER1Q and R, contained the same kind of fill as the others, but were otherwise different in character. ER1Q was a linear feature roughly four inches across by eighteen inches long. It extended into the east wall of the unit, and seemed to lie along the junction between ER1M and ER1P. It was shallow, and its bottom lost definition at about two inches from the top of the subsoil. The only artifact it contained was a badly rusted nail which was recovered. ER1R was a rectangular feature contiguous to the south side of ER1Q. It too lost definition at about two inches below the top of the subsoil.

ER1P proved to be sterile subsoil consisting of yellowish sand shot through with dark brown stains that proved to be natural bands of iron-rich soil. Tests into the slightly more compact and more orange-colored ER1M demonstrated that it was sterile subsoil.

Little organic matter was present below the root mat except for living roots and decayed humus. Most of the living roots did not penetrate below the subsoil, and those that did followed features.

The diagnostic characteristic of the old topsoil was the presence of charcoal. Charcoal flakes in ER1B, C, and D may be upward mixture from the underlying layer, the result of this part of the site becoming a trafficway late in the period of occupation. Likewise, the presence of charcoal flakes within the features proved to be the diagnostic device by which the features' sides and bottoms could be defined.

Unit #2, 235 - 240 N, 225 - 227.5 E

Unit 2 lies behind the house mound and the well. There were no artifacts on the ground surface. The plant population consisted of grasses and strawberry crowns, directly on the soil surface, with no dense mat of vines and roots. There was considerable mole disturbance. The soil was very dry and sandy and nearly without humus.

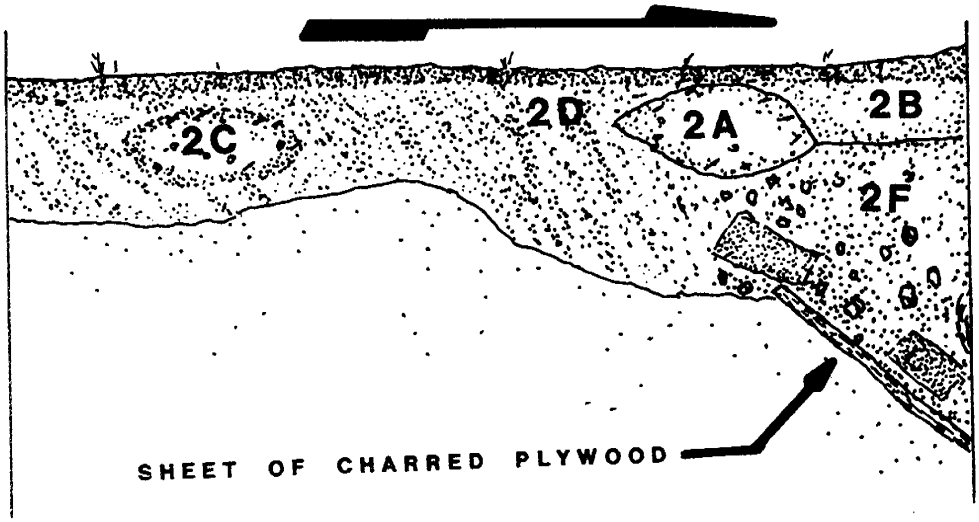
Just below the sod was a deposit of brick chips and gravel in the middle of the unit near the northern end. Trowel cleaning revealed what appeared to be two large amorphous grey features, containing gravel, some brick chips, and a small amount of trash, and an area of very soft sand at the southeastern corner of the unit. The two grey features were ER2A and ER2C. The sandy area was named ER2E. The soil between ER2A and the northern wall was called ER2B, and the soil surrounding ER2C and lying between ER2A and ER2E was designated ER2D.

FIGURE 14
Unit 2

2 Root mat and surface humus
2A Lens of ash and burned debris
2B Zone of redeposited topsoil and debris
2C Lens of ash and burned debris
2D Mottled redeposited topsoil
2E Zone of sandy gray soil
2F Trench filled with burned rubble

scale in feet

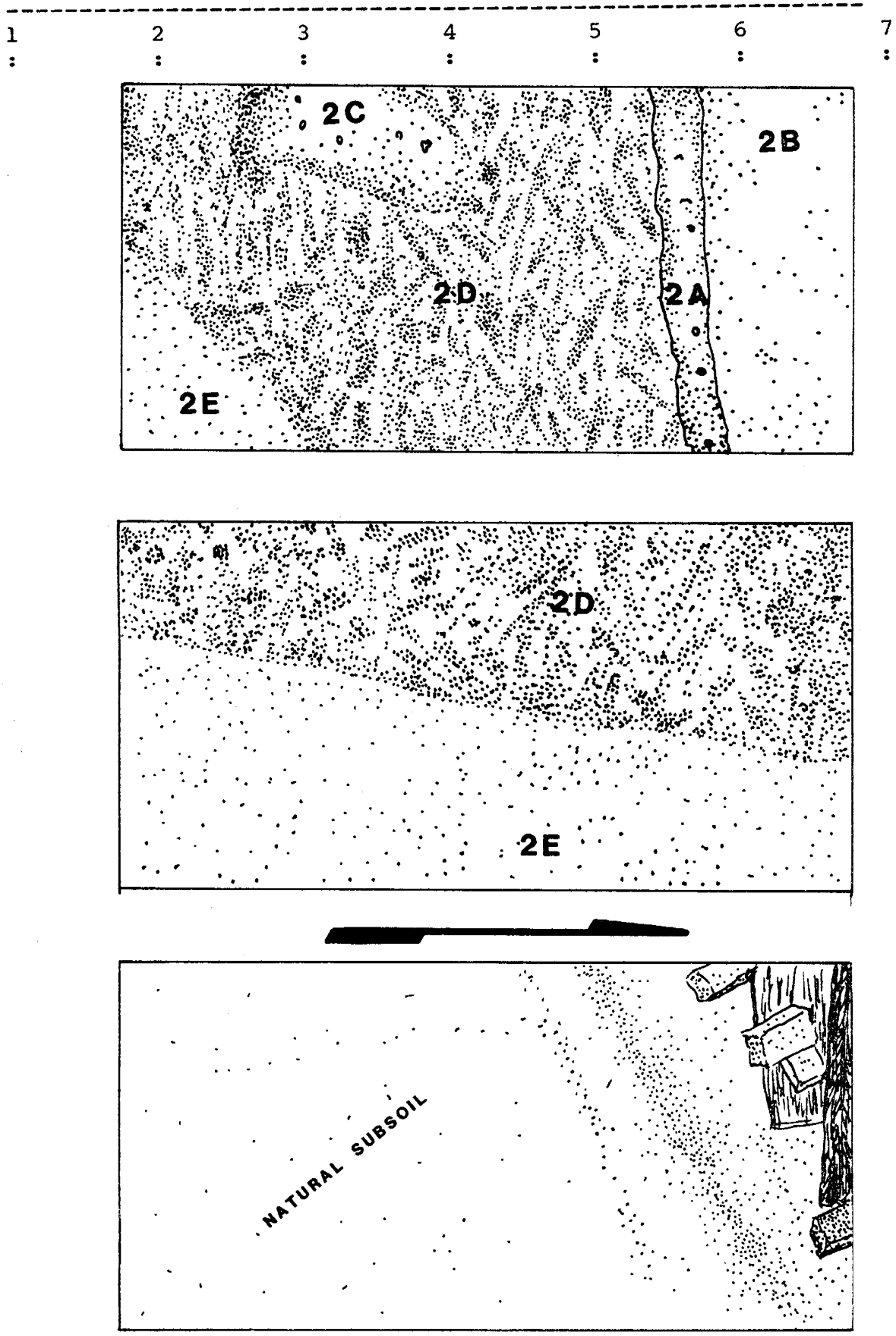
1 2 3 4 5 6 7



WEST FACE OF UNIT 2

FIGURE 15
Unit 2, continued

scale in feet



PLANS OF UNIT 2, DESCENDING

Troweling the features revealed that ER2A - ER2D were lenses of ash and burned debris mixed with sand. This layer overlay most of the unit, extending to a depth of four to six inches except over ER2E. It bottomed out on sterile soil, of which ER2E was a part.

Along the north wall, ER2A - ER2D merged with what appeared to be a long trench containing considerable burned building rubble and trash. This trench was named ER2F.

In order to determine the depth and extent of the trench, the unit was sectioned along the north end. Large chunks of burned building debris and brick rubble began to appear about four inches below the bottom of ER2D - ER2F. The trench, ER2F, seemed to take a right-angle turn near the north wall of the unit.

The trench across the north end of unit 2 was much deeper than the trench which ran down the west wall, and contained debris from the destruction of a building. This debris included a large piece of partially charred plywood on the bottom next to sterile sand. There were no clear boundaries visible between this trench and the much shallower trench along the west wall (ER2F); just as there were no clear boundaries between ER2A -ER2D. Thus it became apparent after the unit was cleaned that the upper features with the exception of ER2E were scatter from the destruction of a building which ER2F represented.

The exception, ER2E, was sterile, sandy, and heavily mole-disturbed. It marked the limit of the spread of trash from the destruction of the building in ER2F. The unit did not provide enough evidence to determine whether ER2E lay within a building which had a partial basement or deep foundation, or outside the building. Also, the unit was not big enough to determine whether the part of ER2F which lay along the west wall of the unit was a building feature such as a footer trench for a wing of the destroyed building, or an incidental feature such as a tire rut which had been filled with (or had become filled with) debris from the building. In view of the obviously recent nature of the deposit, no attempt was made to trace it into adjacent units.

Shovel tests along the south and east walls of this unit revealed sterile natural soil.

Unit #3, 242.5 - 245 N, 130 - 135 E

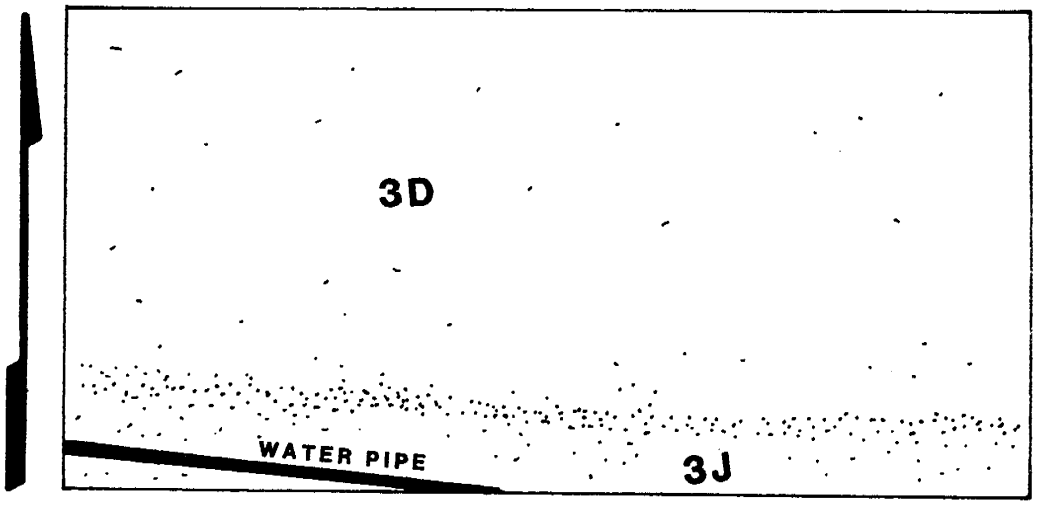
ER3 lay in the middle of the drive west of the house. Vegetation consisted of a mat of vines and vine roots, including creeper, poison ivy, morning glory, and blackberry. There was very little grass. Mixed with and just below the root mat was a layer of brown gravel and sand which overlay the entire unit. This was

FIGURE 16
Unit 3

3	Root mat, gravel, and sand
3A	Brown sand zone
3B	Black oiled sand
3C	Gravel and brown sand with ash
3D	Packed grey-brown sand
3E	Gravelly grey sand
3F	Grey sand lens
3G	Grey sand lens
3H	Grey sand lens

scale in feet

1 2 3 4 5 6 7



PLAN OF UNIT 3, BOTTOM

designated ER3, surface. A black stain ran approximately through the middle of the unit, from southeast to northwest. The brown sand to the north of the stain was labelled ER3A; the stain was labelled ER3B; and the brown sand and gravel to the south of the stain was labelled ER3C.

ER3A was removed, and found to overlie a dense layer of ash, coal, and clinker, which covered most of the northeasterly corner of the unit. This layer was labelled ER3B.

ER3C was removed next. This was a layer of gravel and brown sand. It bottomed on packed, grey-brown sand which contained little gravel, designated ER3D. ER3C contained lumps of coal ash, a whitish, pasty or claylike substance. In the southwest corner, ER3C bottomed on a gravelly grey sand different in texture from ER3D. This last was designated ER3E.

ER3B was removed with a shovel after trowel testing. This level was a homogenous mix of coal ash and clinkers, with a small amount of slate. ER3D lay below this level; the surface of ER3D below ER3B was perfectly smooth and slightly banked, and looked as if it had been graded. It contained a disturbance at the southwest corner.

In order to define the seemingly ephemeral features in the southwestern corner of the unit, ER3D was cut to create a horizontal floor. A sand-filled feature clearly showed along the southern side of the unit. ER3D contained packed orange sand with streaks of what looked like washed sand. ERJ, the linear feature, was a more loosely packed yellowish sand which contained lumps of both grey sand and brownish sandy clay soil. It cut through a rectangular feature containing grey clay, which was named ER3K.

As it was difficult to tell whether or not the inclusions in ER3J were features, they received the designations ER3F, G, and H. These proved upon testing to be inclusions and not features.

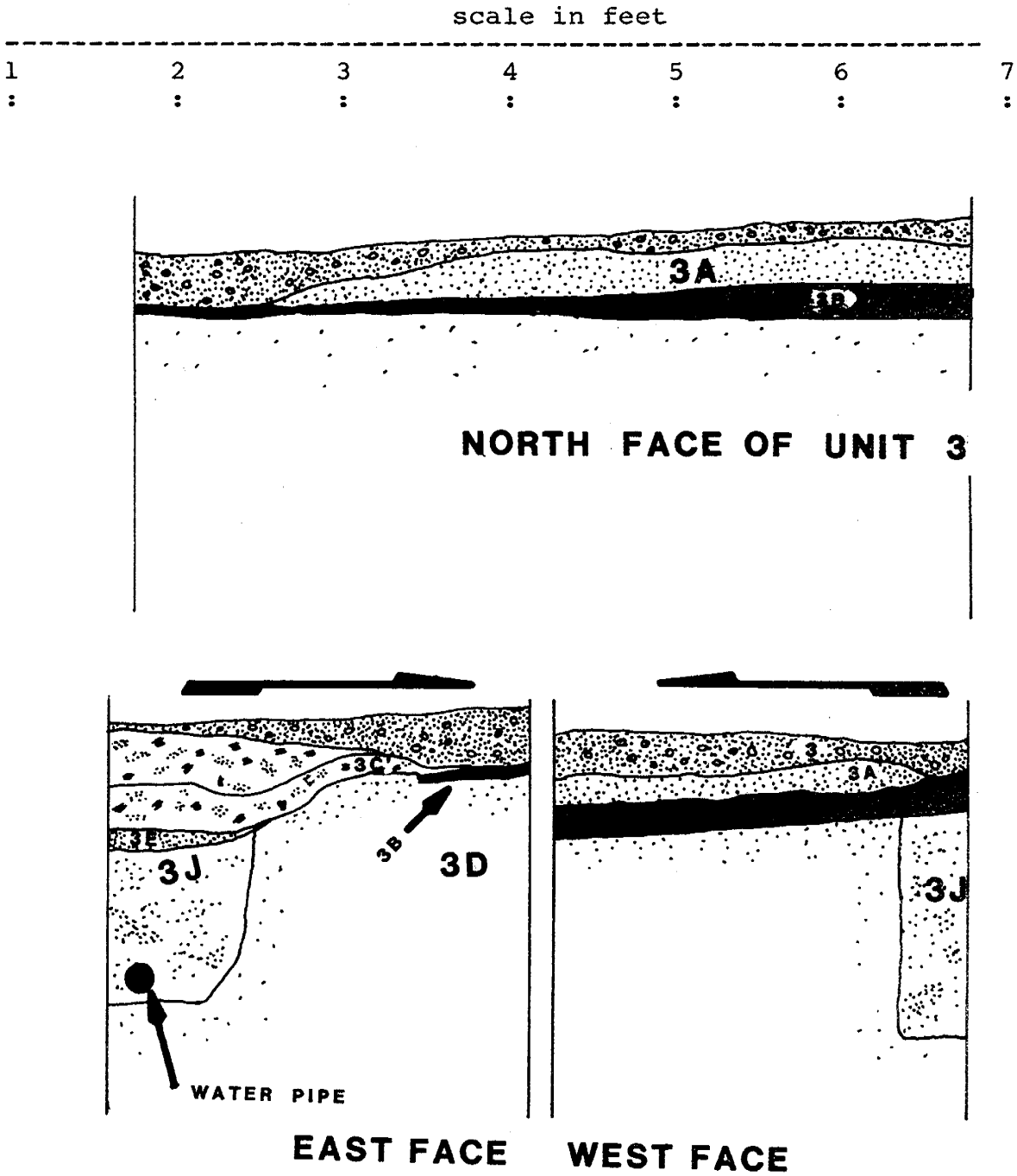
ER3K was a square feature, possibly a postmold, which was cut by ER3J. ER3K contained densely packed grey sandy clay, but no artifacts. Its bottom was poorly defined, at least in part because of the sandy soil. It seemed irregular rather than square or round.

With the partial removal of ER3J, the definition of ER3C was clear in the south profile of the unit. It was actually two thin, irregular levels. ER3C was retained for the brown sand and gravel, but a thin level containing considerable marly or ashy material was renamed ER3C'. The unit was photographed and drawn at this point, to be sure to include ER3C'.

Trowelling could not reveal a clear boundary between ER3D and ER3J, so the unit was shovel cleaned to the point where the

FIGURE 17
Unit 3, continued

3J Water pipe trench



boundary was clear. ER3J was removed with a trowel. At the east end of the unit, ER3J bottomed on soil similar to ER3D, with a square profile. At the west end of the unit, a 1.5" o.d. water pipe was found in place, extending into the west and south walls of the unit. It was nearly at the bottom of ER3J.

Unit #4, 145 - 150 N, 187.5 - 190 E

ER4 lay southwest of the house mound. The plants consisted of vines, primarily honeysuckle and blackberry, and of a few young trees and shrubs. Roots from a nearby young wild cherry tree cut through the unit also.

Soil from the surface to the bottom of the root mat, approximately the top four inches, was designated ER4, while the topsoil below the root mat was designated ER4A. Aside from the presence of heavy root disturbance, the two soil levels were virtually indistinguishable. No features were visible in either ER4 or ER4A.

Several pieces of fire-broken rock and stone fragments were found near the bottom of ER4A. This level also contained a small, amorphous scatter of charcoal and brick chips towards the northerly side. There were no features except root molds visible in the subsoil.

The subsoil, ER4B, extended approximately another six inches to a sterile layer of sand. It contained tiny fragments of charcoal, and occasional tiny angular fragments of quartz.

Unit #5, 285 - 290 N, 160 - 162.5 E

Unit 5 lay in the driveway north of the house mound. Vegetation consisted of creeper, poison ivy, blackberry, honeysuckle, and some grass. The root mat was dense.

The soil below the sod was very loose and dry grey-brown sand with some gravel. The gravel was not as dense as in unit 3. This stratum was designated ER5.

ER5 bottomed on densely packed grey soil across the entire unit. This was designated ER5A. This soil was harder and somewhat more densely packed at the south end of the unit than at the north end, but there was no discernable edge between the hard and the softer soils. There were large brick fragments, coal ash, iron, and brick chips within level ER5A. Most of the larger pieces lay towards the north end of the unit.

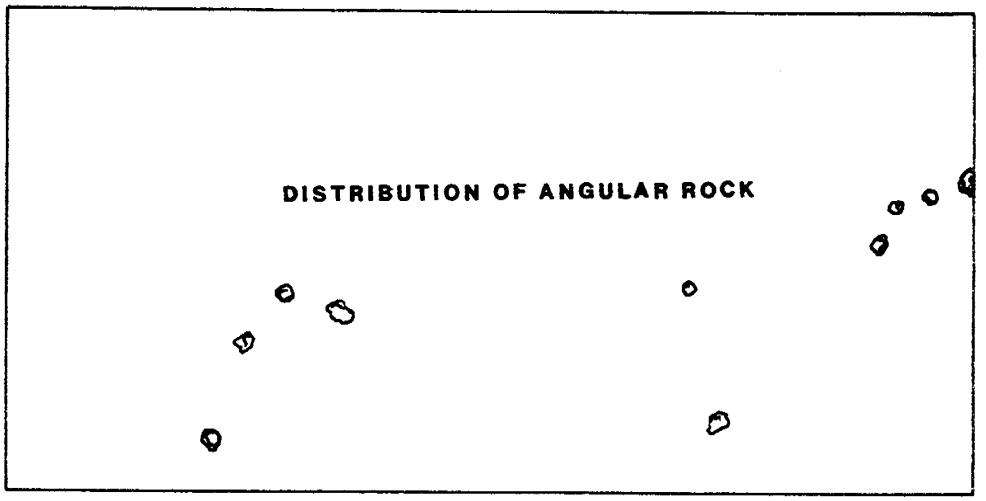
ER5A bottomed on yellow-tan sand. The bottom was very clearly delineated, almost a crust. The sand was designated ER5B. There were no clearly defined features in ER5B, but the level contained

FIGURE 18
Unit 4

4 Root mat and topsoil
4A Grey topsoil
4B Mottled orange soil horizon

scale in feet

1 2 3 4 5 6 7



PLAN OF UNIT 4, 9" TO 11" DEEP

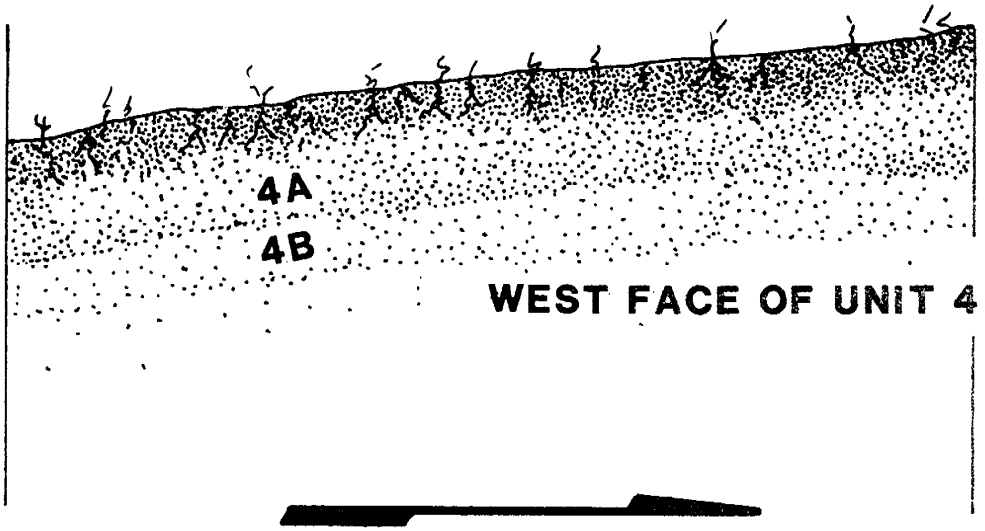
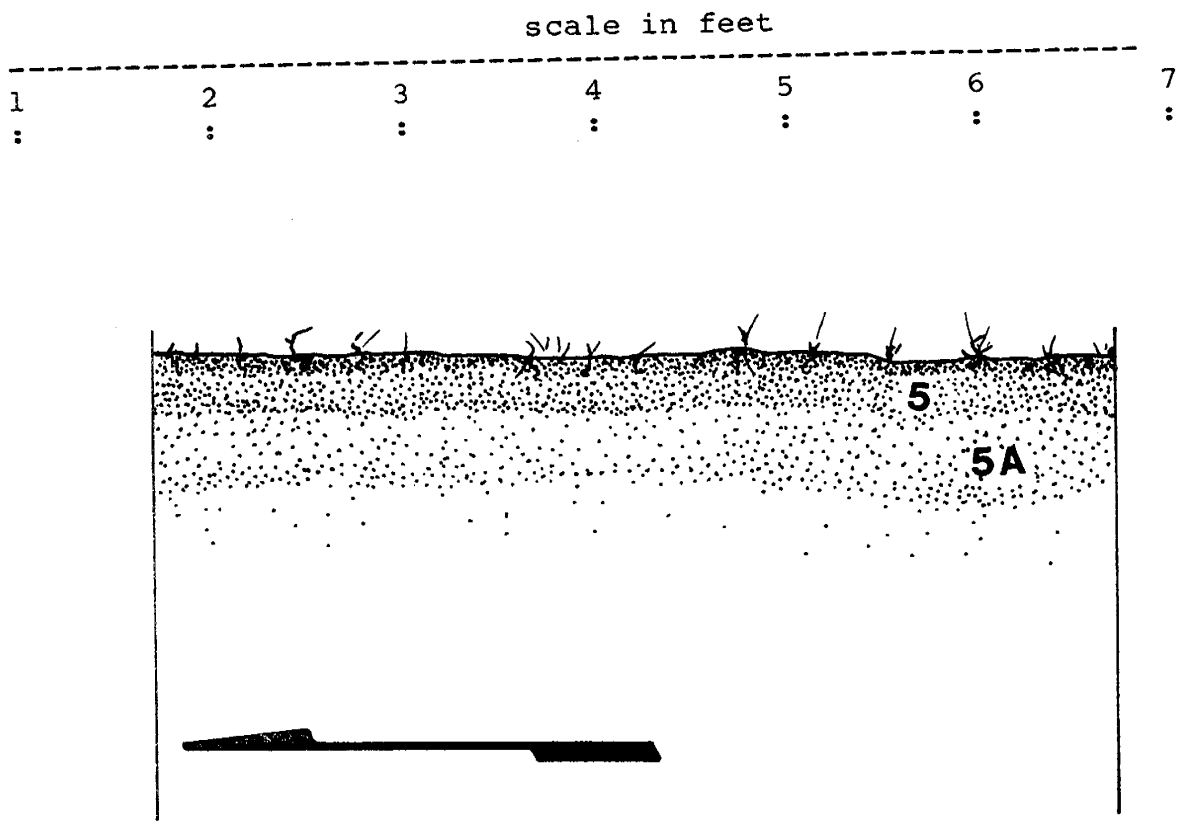


FIGURE 19
Unit 5

5 Loose grey-brown sand with gravel
5A Packed grey soil with coal ash, bricks, trash
5B Yellow-tan sand, natural undisturbed soil



WEST FACE OF UNIT 5

a depression in the northwest corner and another in the southeast corner.

ER5B was tested to about one foot in the southerly end of the unit. It was natural undisturbed soil.

Unit #6, 305 - 310 N, 225 - 227.5 E

ER6 lay just south of the barn, barely grazing the field. The root mat was slight, consisting of long grass over the northwesterly portion of the unit, and young wheat over the southeasterly portion.

The surface artifacts included big brickbats. The root mat was removed with a shovel, and the plow zone was trowelled. No features were visible. The surface and the plow zone were designated ER6. Furrows showed as black lines in the subsoil, but they were not drawn. A small deposit, ER6A, at the south end of the unit was filled with cut nails.

A deep, lensed feature located at the south end of the unit in the vicinity of the nail deposit was named ER6B. It contained peaty black soil, some brick fragments, charcoal chips, and nails. A pile of articulated but unmortared bricks lay in the bottom of the feature. This is typical of the support often placed in a planting hole under the root crown of a tree with a palmate root structure, and is consistent with the peaty soil and general configuration of the feature.

Unit #7, 205 - 207.5 N, 260 -265 E

The surface of ER7 was covered with trash spread from a nearby recent trash heap. Also, it was full of nuts from a nearby walnut tree. The nuts were not saved. The surface and root zone were numbered ER7. A cluster of yellow sand spots seemed to be the remains of rotted nuts.

ER7A was a layer of barely harder sand just below the root zone. It was slightly lighter in color than ER7. It also seemed to contain slightly more coal chips than ER7. There were no clearly recognizable features except large root molds which still contained recognizable root remains.

A linear yellow clay feature appeared cutting diagonally across the western end of the unit near the bottom of the plow zone. This was labelled ER7B. The soil between the northwest corner and the feature was named ER7C, and the remainder was labelled ER7D.

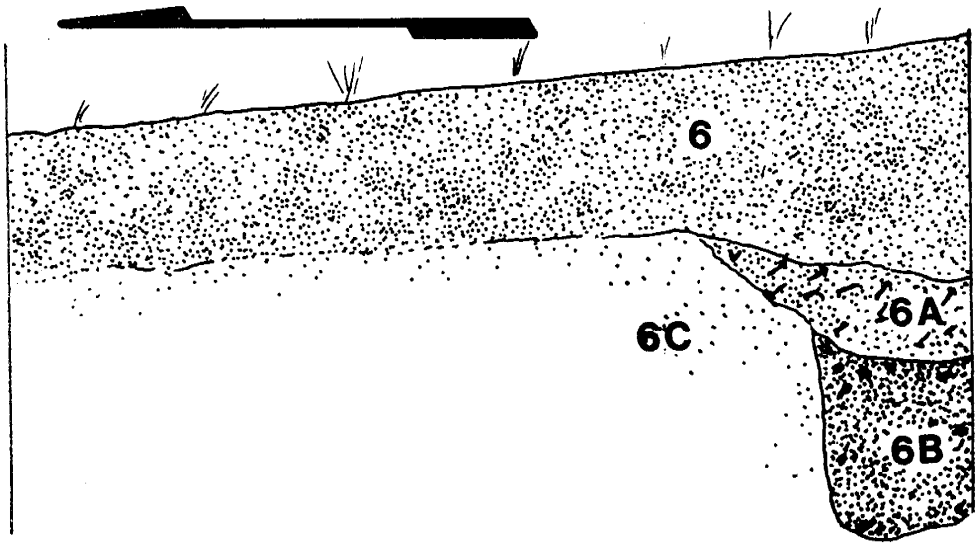
Initially, ER7B seemed to be intrusive, but as it was looked a good deal like subsoil, that assumption did not seem at all certain. Proceeding on the assumption that darker more organic

FIGURE 2Ø
Unit 6

6 Grey topsoil plow zone
6A Lens of trash containing many cut nails
6B Probable planting hole, peaty soil and trash

scale in feet

1 2 3 4 5 6 7



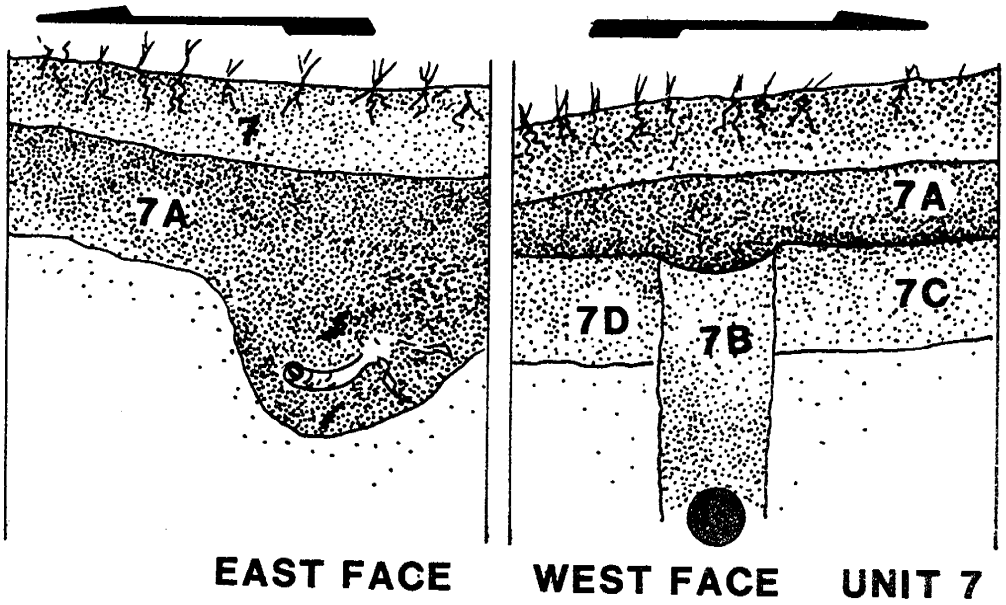
EAST FACE OF UNIT 6

FIGURE 21
Unit 7

7	Surface root mat and trashy topsoil level
7A	Light gray sandy topsoil with coal chips
7B	Soil pipe trench
7C	Mottled orange-brown soil horizon
7D	Mottled orange-brown soil horizon

scale in feet

1 2 3 4 5 6 7



soils are more likely to be disturbed, I removed ER7C and ER7D first.

ER7C seemed to be a root mold. ER7D resembled ER7B in composition, with larger chunks of coal. It was somewhat lower on the east end, and seemed to contain a large, interconnecting root mold mass. ER7B appeared to be subsoil, connecting to the subsoil below ER7D.

ER7B was removed, and initial suspicion that it was intrusive was confirmed. The westerly part of the unit was sectioned with a shovel, revealing an iron sewer pipe at the bottom of ER7B. Soil colors had been inverted, so that the lighter-colored deposit was in fact the newer.

Unit #8, 160 - 162.5 N, 240 - 245 E

Unit 8 was immediately downhill from a young walnut tree and was littered with nuts. Vegetation was almost entirely honeysuckle. The root zone was labelled ER8.

ER8A was similar to the sandy humus which made up topsoil elsewhere on the site. It contained no visible features. The subsoil was root-disturbed, and was labelled ER8B. There were no features. A fire - broken rock was found in one of the root molds in ER8B; the root mold also contained coal fragments.

Unit #9, 115 - 120 N, 210 - 212.5 E

Unit 9 lay southwest of the house mound near the crest of the Saulsbury Road cut. The root mat was mostly honeysuckle similar to units 4 and 8.

Topsoil in this unit was very shallow, and it was not possible to distinguish between the upper and lower topsoil horizons, as was the case in most units. It contained negligible brick and coal fragments, and only a scattering of other cultural material.

No features were visible in the top of the subsoil. The subsoil in the northerly two feet of the unit was shaved with a shovel for about six inches, but proved to be utterly barren even of natural gravel.

Unit #10, 150 - 155 N, 122.5 - 125 E

Unit 10 was located on the slope of the road cut at the west side of the knoll. It lay on the north bank of an old trafficway trace up the knoll from the road to the farmyard. Vegetation consisted of creeper, honeysuckle, poison ivy, periwinkle, and what appeared to be spurge.

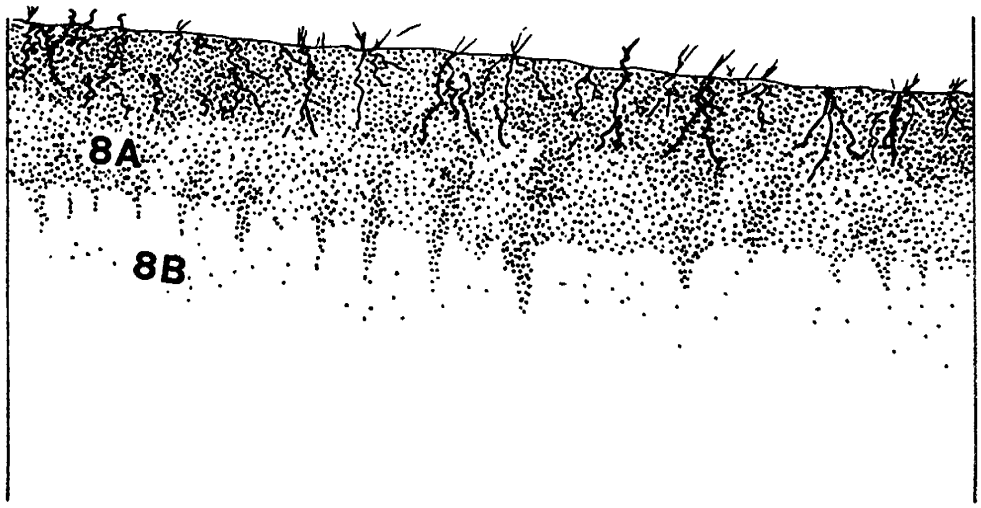
As might be expected on a slope, the topsoil was very thin. It

FIGURE 22
Unit 8

8 Sandy humus topsoil, root mat
8A Sandy humus topsoil
8B Mottled brown-orange soil horizon

scale in feet

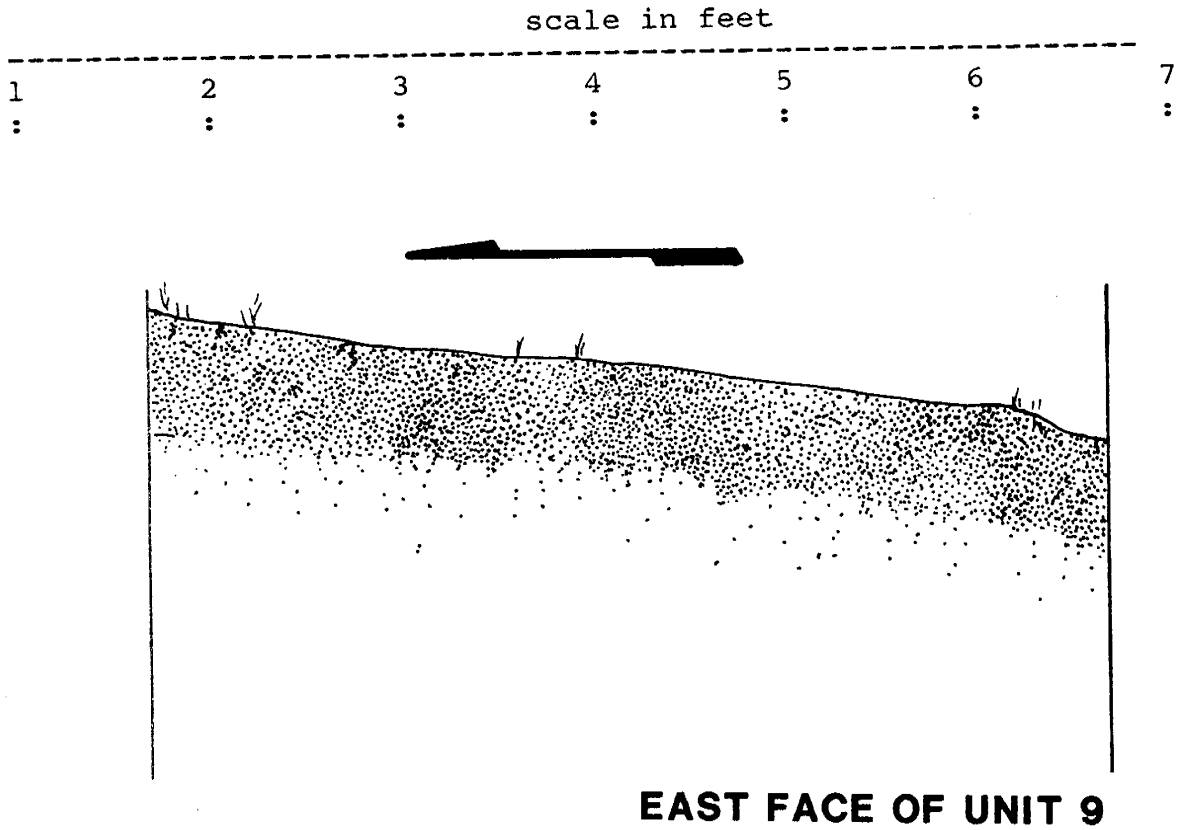
1 2 3 4 5 6 7



NORTH FACE OF UNIT 8

FIGURE 23
Unit 9

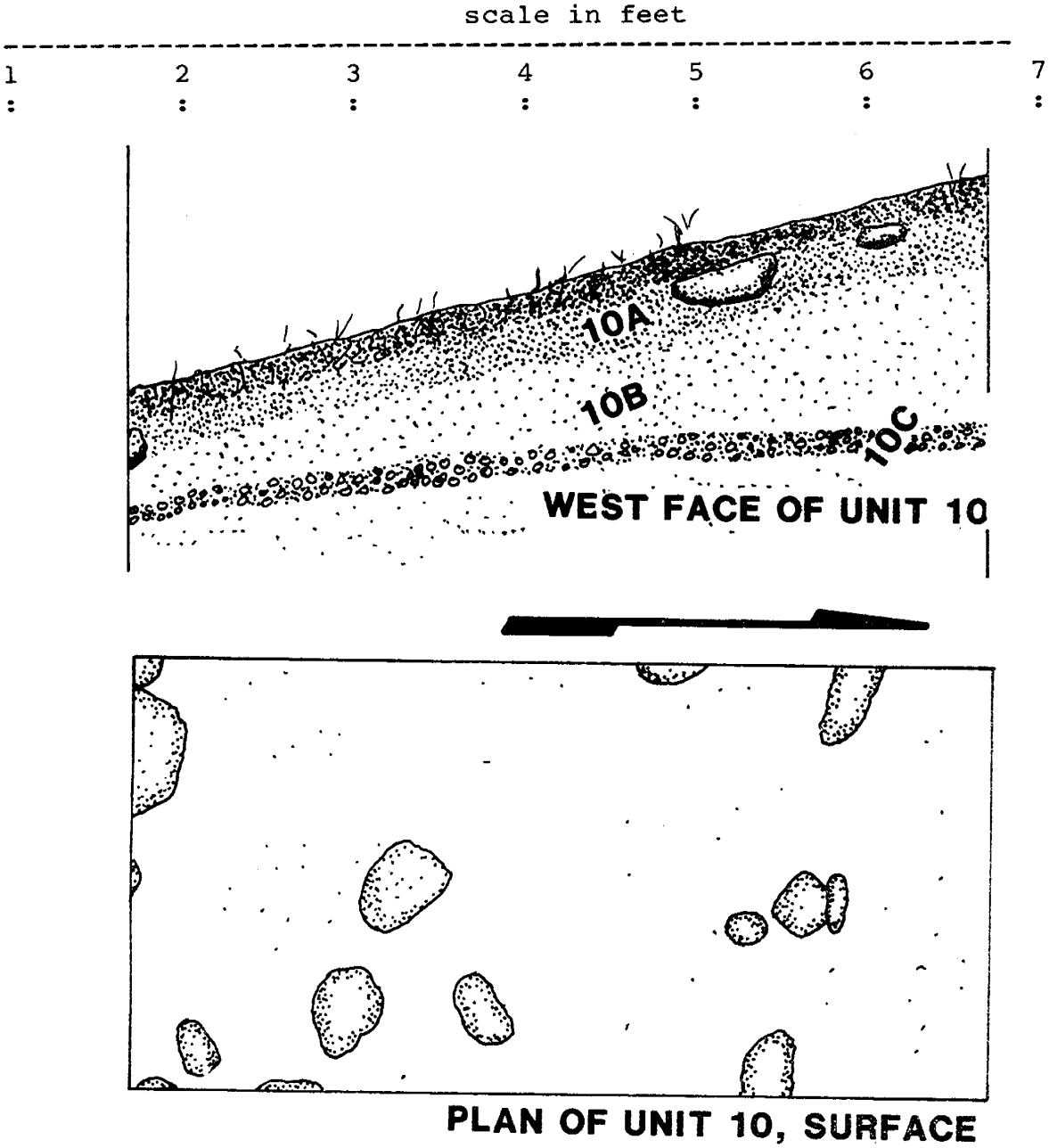
9 Grey sandy topsoil, without distinguishable horizons



EAST FACE OF UNIT 9

FIGURE 24
Unit 10

10 Thin sandy topsoil and root mat
10A Sandy topsoil around surface of cobble features
10B Sandy topsoil among the cobbles
10C Natural layer of gravel



was labelled ER1Ø. At its bottom was a thin scatter of pea gravel, and some broken pieces of cryptocrystalline silicates. There was virtually none of the usual scatter of ash, glass, and nails. There were no features visible in the apparent subsoil below ER1Ø.

ER1ØA was the sandy soil below the topsoil. It contained large cobbles laid in a line. The cobbles were drawn and photographed, and their vertical location from the highest corner was noted. Soil around the cobbles was designated ER1ØB.

ER1ØB bottomed on a slightly greyer sandy soil, assumed to be natural. This fine sand was streaked with thin rusty strata, typical of undisturbed subsoils.

ER1ØC, below ER1ØB, was rather quickly removed with a shovel, as it was sterile. The unit was shovelled level on the bottom, in order to observe soil strata. It was difficult to tell whether the ER1ØC was totally natural or contained some fill. It seemed in profile to be a natural depression which had been partly (probably by natural erosion) filled in antiquity with similar material.

Unit #11, 14Ø - 142.5 N, 12Ø - 125 E

Unit 11 was immediately downhill from 1Ø. It lay in what appeared to be an old driveway bed. ER11 was the root zone, and ER11A was the soil just below. A cobble path ran through the middle of the unit. ER11B was the east end outside the stones. ER11C was the west end outside the stones. ER11D was the soil around the line of stones. The unit was drawn and photographed at this point.

ER11B was removed. There was a weak boundary between ER11B and ER11D, the cobble matrix. ER11C was indistinguishable from ER11D. It contained a level of cobbles along the unit edge. ER11B, C, and D all bottomed on a natural bed of pea gravel and sand, and appear to be a single deposit.

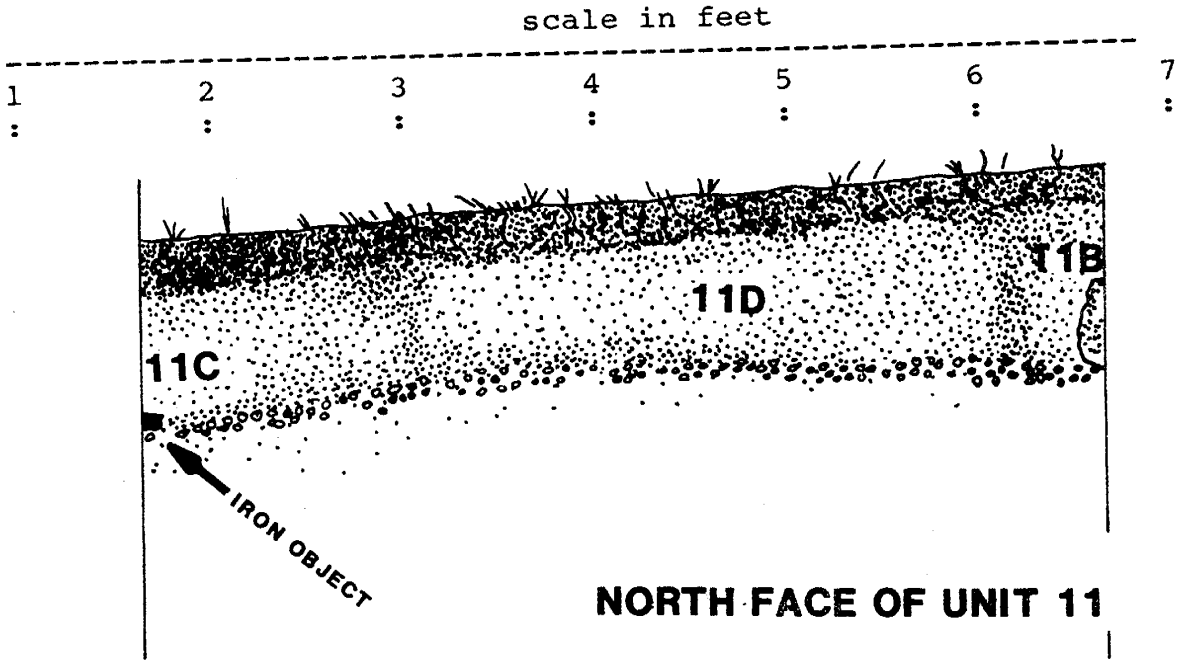
Unit #12, 32Ø - 322.5 N, 165 - 17Ø E

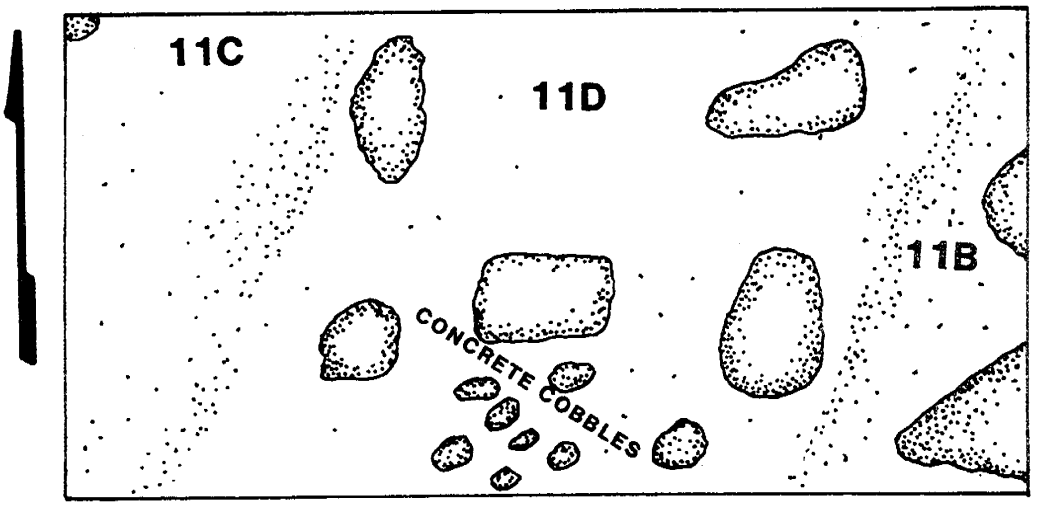
Unit 12 lay on the north side of the house in a postulated trafficway between two old Keiffer pear trees; this had been assumed to be the original lane from Denny's Road to the ceremonial front of the house. The root mat, ER12, consisted of honeysuckle and creeper. The soil below was loose loamy sand. There were fragments of at least four automobile hubcaps in the vicinity of the unit, but nothing on top of the root mat within the unit.

The sandy humus extended to about six to six and one-half inches below the root mat. It contained a tiny amount of coal, some brick fragments, and some small stones which resembled pea

FIGURE 25
Unit 11

11 Root zone of topsoil
11A Topsoil below root zone
11B Sandy grey topsoil east of cobble path
11C Sandy grey topsoil west of cobble path
11D Sandy grey topsoil inside cobble path

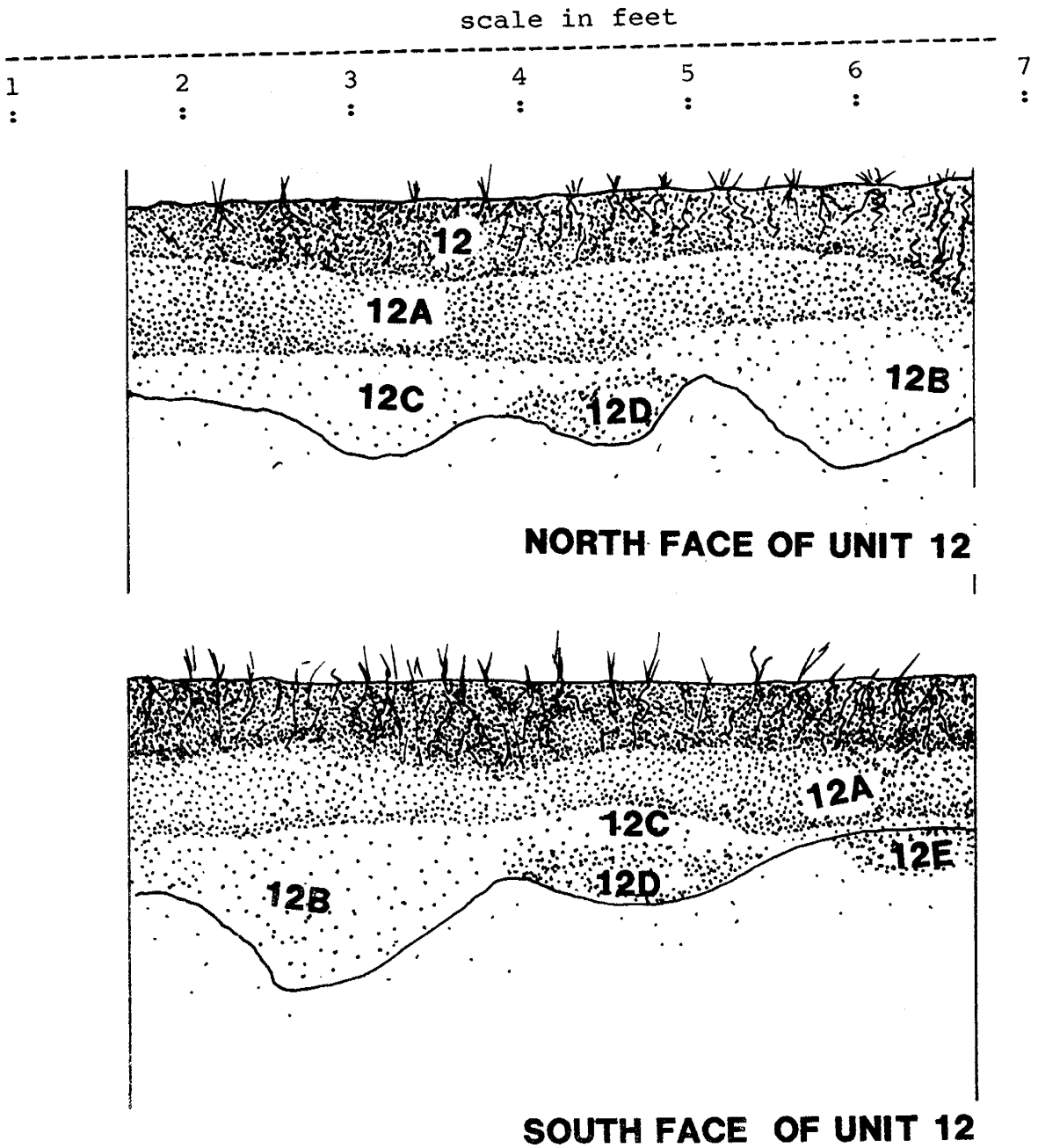




PLAN OF UNIT 11, SURFACE

FIGURE 26
Unit 12

12 Root mat, sandy humus
12A Loose loamy grey sand
12B Hard yellow sand fill
12C Mottled yellow sand
12D Root mold
12E Root mold



gravel. It was named ER12A.

ER12A bottomed out on sand which was either packed or naturally quite hard. This sand, ER12B, extended under the whole unit except the far southwest corner. All artifacts from ER12A came from the bottom one or two inches of the level.

The soil below ER12A contained no obvious visible features; however, the softer sand at the southwest corner seemed to be possibly a root mold. It had no clearly discernible boundaries, either of texture or of color. Sweeping the unit revealed that the eastern approximately 1/3 of the unit consisted of hard pale sand, while the remainder consisted of mottled yellow and brown sand which is typical of the interface between the topsoil and the subsoil in this area.

The hard sand at the eastern end of the unit was numbered ER12B, and the mottled yellow sand was numbered ER12C.

As ER12B was removed, it stayed hard all the way to subsoil. The subsoil was similar to subsoil elsewhere on the site. A large root mold on the south wall seemed to explain the shape of ER12B, and the presence of the long wedge of ER12C along the south wall at the east end (see drawing).

The tree root seemed to straddle the juncture between ER12B and ER12C. However, the root disturbance was too extensive in ER12C to be sure of the exact relationship between the two deposits.

The unit was shaved to subsoil with the shovel. In profile, the tree root at the juncture of ER12B and C seemed to have grown up in a depression or run of some sort.

Unit #13, 285 - 29Ø N, 122.5 - 125 E

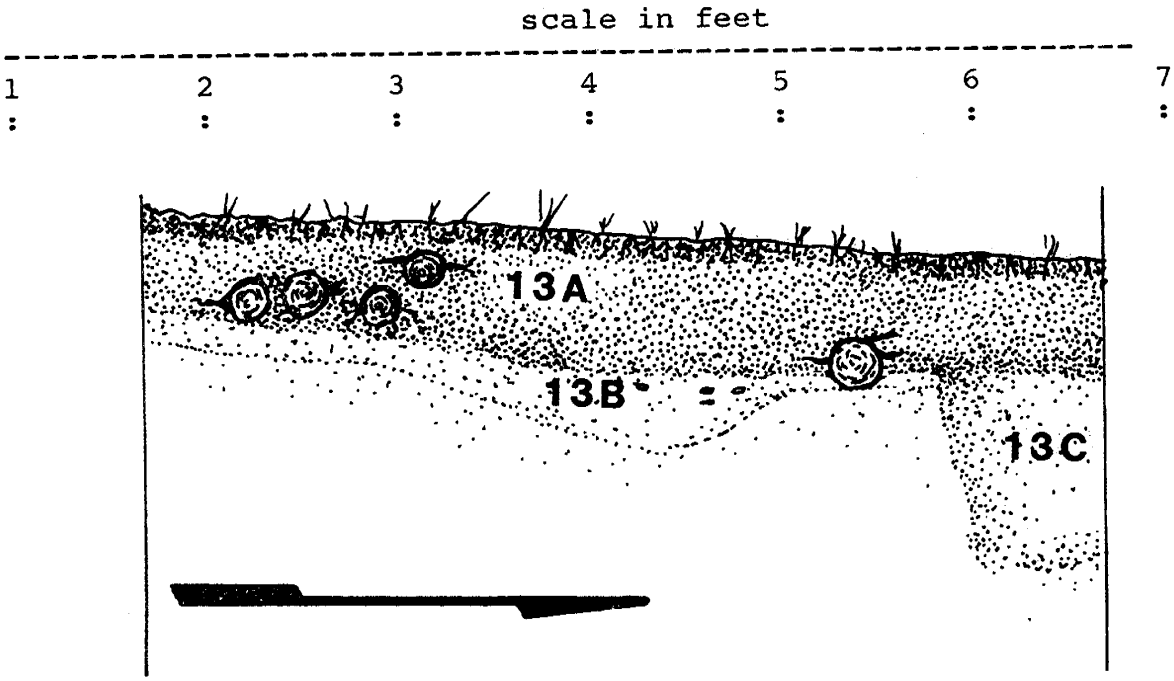
Two young cherry trees and a large clump of decorative grass grew in unit 13. The surface root mass, ER13, consisted mostly of feeder roots from the trees.

Soil below the surface and root mat , ER13A, was fine sand which seemed to be packed but was actually quite full of 1/4" to 1/2" roots which made the trowel skim over the surface of the level. There were no visible features in the northern end of the unit, and a dense mass of large roots occluded the southern part.

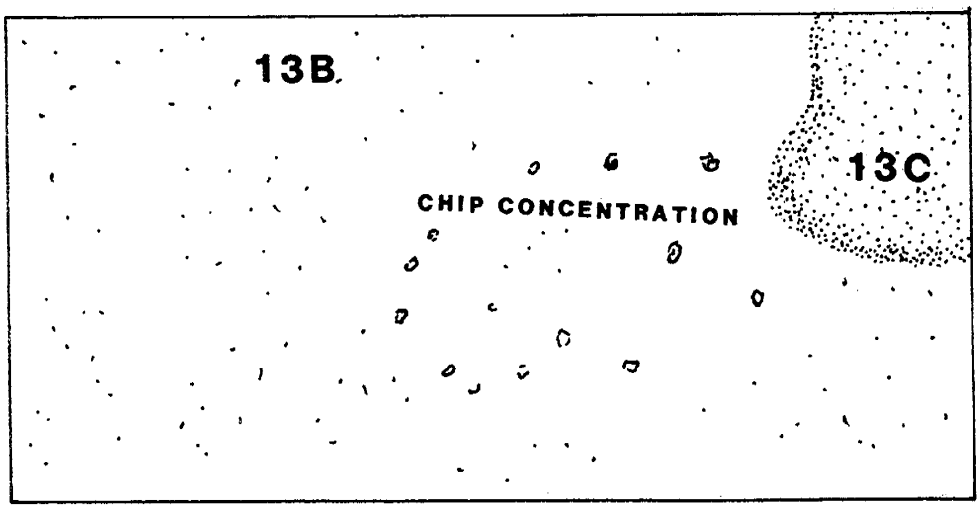
The sand in the north half of the unit, ER13A, was removed. Below was a layer of sand which appeared to be sterile. It was numbered ER13B. A brown, squarish feature was found in the northwest corner of the unit, numbered ER13C. Both ER13A and B extended into the area covered by the tree roots.

FIGURE 27
Unit 13

13 Surface root mat, filled with tree roots
13A Fine sand, filled with fine roots
13B Mottled orange-brown soil horizon
13C Roughly rectangular brown mold



WEST FACE OF UNIT 13



PLAN OF UNIT 13

The roots were removed next, by sawing them flush with the excavation walls. The remaining soil of ER13A was removed. The topsoil, ER13A, was quite shallow and seemed to have never been plowed.

ER13C was roughly rectangular, and contained moist brown sand. It seemed to lose definition at the bottom due to root disturbance.

ER13B contained many chips and some fire-broken rock. The chips spread through the top one or two inches of ER13B, roughly in the middle of the unit. Traces of reddened sand suggested a fire just outside the unit's west wall.

Below the lens of chips, ER13B became sterile. After ER13B had been removed, it was possible to finish ER13C, the rectangular feature at the northwest corner of the unit. Its bottom was roughly square but disturbed.

Unit # 14, 310 - 315 N, 120 - 122.5 E

Unit 14 lay exactly on the edge of the field, with its northwest corner extending to the third row of wheat. Vegetation included honeysuckle on the south end.

The plow zone contained no features and no distinguishable levels. It yielded only a few artifacts.

The subsoil was totally sterile. It contained plow scars which were not mapped. It was very soft white sand.

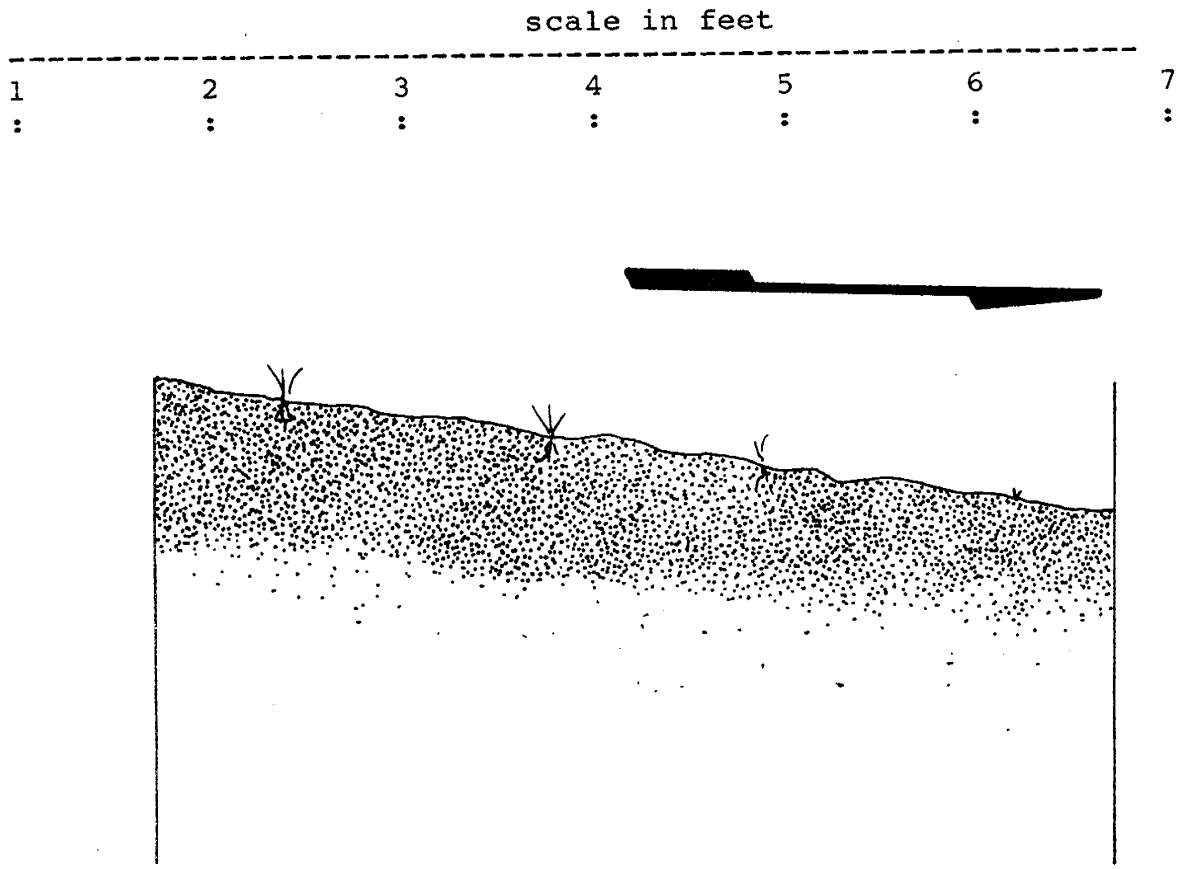
Unit #15, 295 - 297.5 N, 205 - 210 E

Unit 15 lay in the roadway between the house's northeast corner and the barn. Vegetation consisted of blackberry and honeysuckle similar to ER5. The soil immediately below the root mat was light colored loose sand. This and the surface were numbered ER15; it contained no artifacts. ER15 bottomed on a layer of mixed sand, clay, and crushed stone. It seemed to be denser at the east of the unit but no features were evident. The soil held water well; this was the first unit in which sticky clay soil was encountered. The clay level was labelled ER15A. This level contained oil stains. Upon excavation, it became apparent that 15A contained more stone pavement chips on the east and more clay in the west, except in the northwest corner, which was noticeably softer and more sandy. All artifacts in this layer were found atop the clay.

ER15A bottomed on a level of soft brown sandy soil which contained tiny brick chips but no features. This level was labelled 15B.

FIGURE 28
Unit 14

14 Plow zone; sandy topsoil



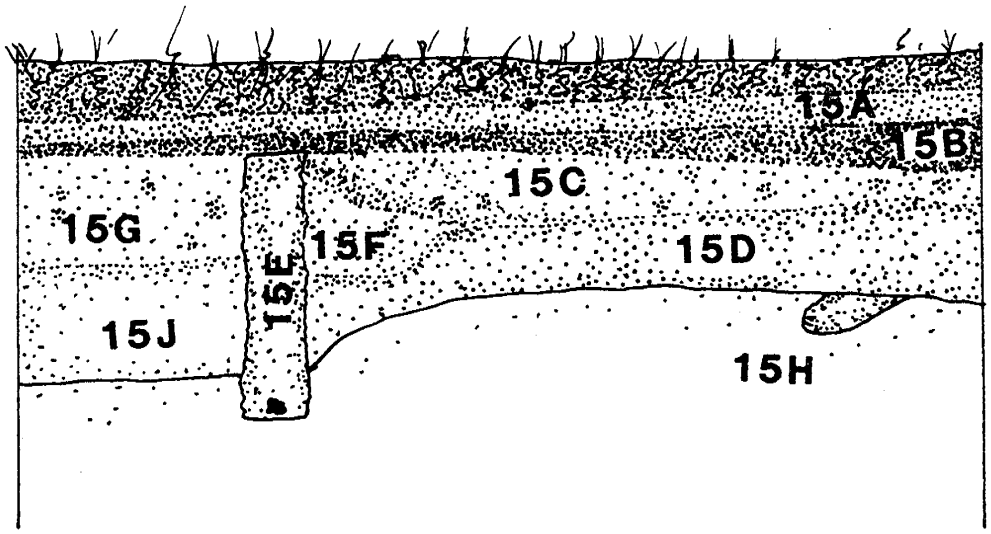
WEST FACE OF UNIT 14

FIGURE 29
Unit 15

15 Root mat and light grey loose sandy topsoil
15A Mixed clay, sand, crushed stone
15B Soft brown sandy soil with brick chips
15C Lens of hard, oily sand with brick and coal chips
15D Light brown packed sand
15E Trench containing direct-burial cable
15F Hard, oily sand with brick and coal chips
15G Hard, oily sand with brick and coal chips
15H Rootmold
15J Light brown packed sand

scale in feet

1 2 3 4 5 6 7



NORTH FACE OF UNIT 15

PLAN OF UNIT 15

ER15B bottomed on a level of densely packed grey-brown soil. No features were visible; this was designated ER15C. It appeared to be old topsoil and was fully sealed below ER15B.

ER15C contained brick fragments and coal chips. It contained some fragments of badly decayed linoleum which were not recovered. It also contained severely rusted lumps of iron, many of which were too decayed to retrieve. The soil in ER15C was so hard that it required shaving with the square-ended spade instead of the trowel; it seemed to have been oiled. The level bottomed on an equally hard but somewhat lighter brown sand.

The lighter brown packed sand below ER15C extended over only the eastern 2/3 of the unit. It was numbered ER15D. The western part of the unit was a trench containing darker material similar to ER15C. That feature was numbered ER15F and ER15G. Between these was a mottled brown and yellow stain running diagonally across the northwest corner of the unit which was labelled ER15E.

ER15E had a roughly square bottom. ER15F and ER15G merged below ER15E. A large lump of almost completely rusted iron lay in ER15E and G. The fragments in ER15E were too rusted to save.

The iron was a large piece of crumpled sheet metal. A few sherds were recovered and the location was noted on the unit plan. It was virtually all in ER15G, and the part in ER15E appeared to be merely rust expansion.

ER15G overlay soil similar to ER15D, a lighter brown packed sand. ER15F also bottomed on soil similar to that in ER15D. ER15E, however, cut between the bottoms of the two units as a dark black stain.

Because ER15D appeared to be sterile, the unit was sectioned at the midpoint of its long axis and shovel shaved at the western end to the level of the bottom of ER15E. That feature turned out to be an electric cable trench between the house and the barn. At its bottom was a three-cable service wire with plastic insulation. This was photographed but not recovered.

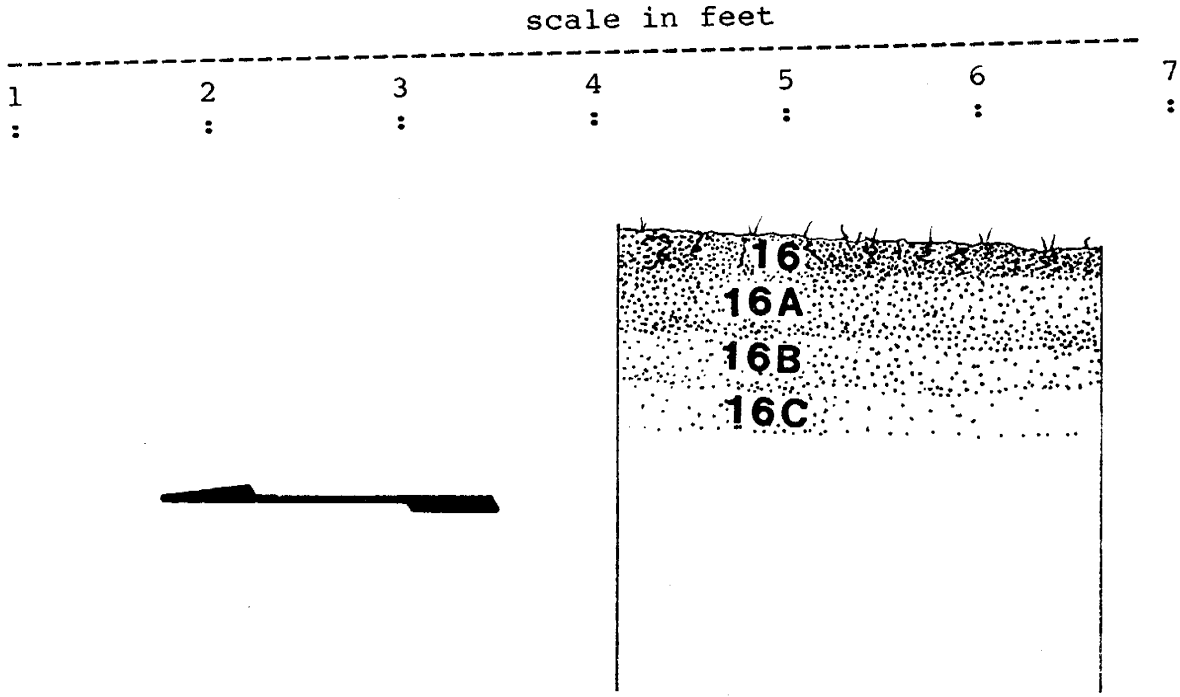
A large root mold visible in the top of ER15D at the eastern end of the unit was numbered ER15H. It was trowel tested, and then ER15D was removed with trowel and shovel to subsoil. The sandy subsoil was removed with the shovel to the depth of the wires in the west end of the unit. This unit completed the randomly chosen segment of the excavation.

Unit #16, 90 - 92.5 N, 245 - 250 E

Unit 16 was situated near the tongue of land bounded by the

FIGURE 30
Unit 16

16 Root mat, compact humus and sand
16A Grey sandy topsoil
16B Mottled orange-brown soil horizon containing fire-broken rock
16C Clay subsoil horizon



EAST FACE OF UNIT 16

gravel pit and the road cut. This seemed to be the nearest original surface to Mudstone Branch still intact, and was close to Kevin Cunningham's earlier test pit.

The vegetation included honeysuckle, small cress plants, beggars' lice, and a small amount of grass. ER16 included the root zone and the top few inches of topsoil. The topsoil was compact humus and sand. There was neither coal nor charcoal in the soil, and only a single brick fragment.

The next level, ER16A, was essentially the same, although it contained very little partly decayed organic matter. The soil had either never been plowed, or it had not been disturbed for a very long time. It contained no visible features, but the historic material was all found in the eastern half of the unit.

A scatter of small fire-cracked rocks appeared about five inches below the surface. The level was marked and was numbered ER16B.

Some prehistoric material lay in the interface between the bottom of the topsoil and the top of the subsoil. The subsoil, ER16C, was sticky, wet clay.

The top of ER16C contained a few flakes of charcoal, but the rest was quite sterile. ER16C was shovel shaved to a depth of a few inches, to confirm its sterile nature.

Unit #17, 205 - 210 N, 140 - 142.5 E

Unit 17 lay just inside the hedge of mature evergreens that marks the western boundary of the house yard. The purpose was to test for scatter within the yard but beyond the driveway. The vegetation consisted of honeysuckle, blackberry, and poison ivy, similar to that on the other driveway units.

The soil just below the root mat was a dark, sandy humus. It was very dry and contained gravel and crushed stone. This was numbered ER17.

ER17 bottomed on a layer of darker grey sand which resembled a pavement. It contained gravel and crushed stone, and was harder than ER17. It was numbered ER17A. Between ER17 and ER17A, and lying on the surface of the latter, was a large scatter of sherds of grey lightly marbleized plastic. There were no visible features in the surface of ER17A.

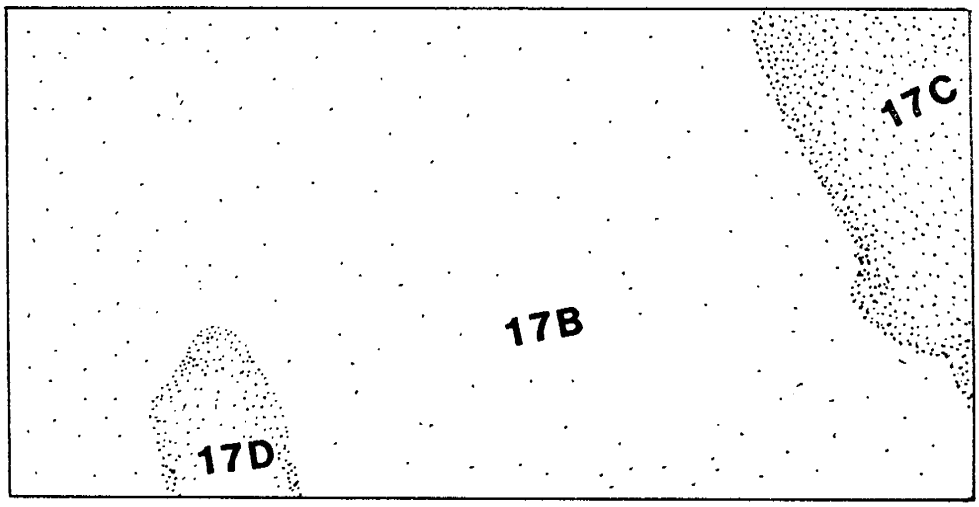
At the bottom of ER17A was a scatter of mostly iron artifacts. The level was thicker towards the north end of the unit, but the thickening was not defined enough to be a feature. ER17B, the next level, looked like the top of the subsoil, yellow and brown mottled sand. An ash-filled feature was visible in the northwest

FIGURE 31
Unit 17

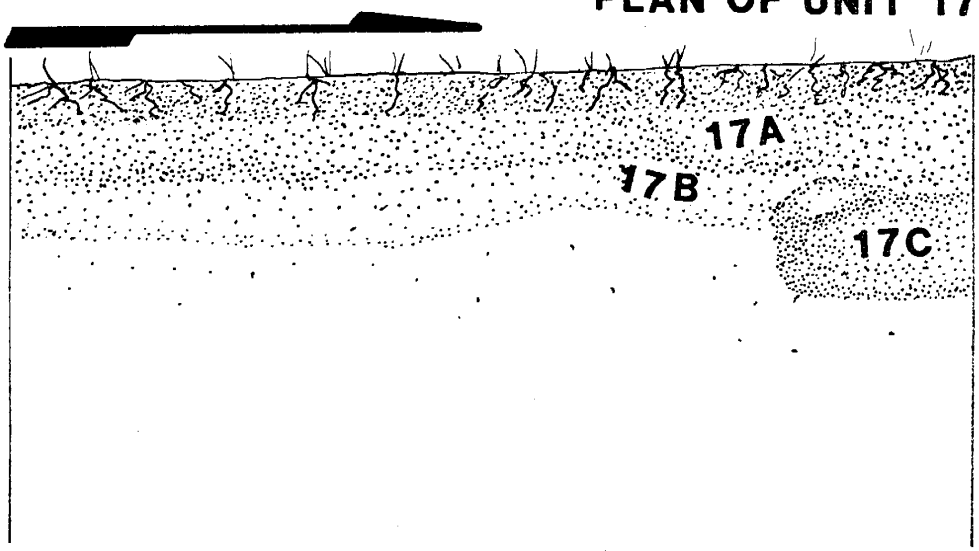
17 Dark sandy humus with gravel and crushed stone
17A Darker hard packed grey sand
17B Yellow and brown mottled sand
17C Ash-filled depression
17D Depression containing ash on loose brown sand

scale in feet

1 2 3 4 5 6 7



PLAN OF UNIT 17



WEST FACE OF UNIT 17

corner of the unit. It was numbered ER17C.

ER17C contained a few tiny brick chips, but no artifactual material. Its bottom was flat but had been disturbed by roots. It was not very deep. It may have been a fence post which took root. Another ashy feature, roughly square in shape, was found near the east wall at the south end; it was designated ER17D.

ER17D had a lens of white ashy material on the top, but that was not very deep. Below that the soil was brown and soft, but the bottom lost definition due to root disturbance. Soil at the bottom of the feature was rather peaty, and lay in channels similar to root molds. This feature seemed to be a burned stump.

Unit #18, 230 - 235 N, 202.5 - 205 E

Unit 18 was sited so that it might intercept the trafficway in the vicinity of the presumed easterly back door just east of the house mound. The surface was somewhat disturbed by burrowing animals, and the unit grazed a noticeable depression in its northeasterly corner. The vegetation was mostly grasses and small herbaceous plants, with a minimum of blackberry vines. ER18, the surface and root zone, contained many brick chips. The depression in the northeastern corner contained soft, loose sand, while the remainder contained harder grey-brown sand.

This unit's stratigraphy was complex. The soil from the surface to the bottom of the large grass roots was numbered ER18. Some of the herbaceous plants had taproots which extended into the levels below. Under ER18 was a layer of sand, numbered ER18A. Below that was a level which seemed to be old topsoil and spread from the burning of the house. It had an uneven surface, perhaps due to the animal burrows noted from the surface.

ER18B was a lensed deposit of burned debris and sand similar to the deposit in unit 2. The lenses of ash and sand were treated as a single matrix.

The depression in the northeast corner was numbered ER18C. It was amorphous in shape, but it was very soft.

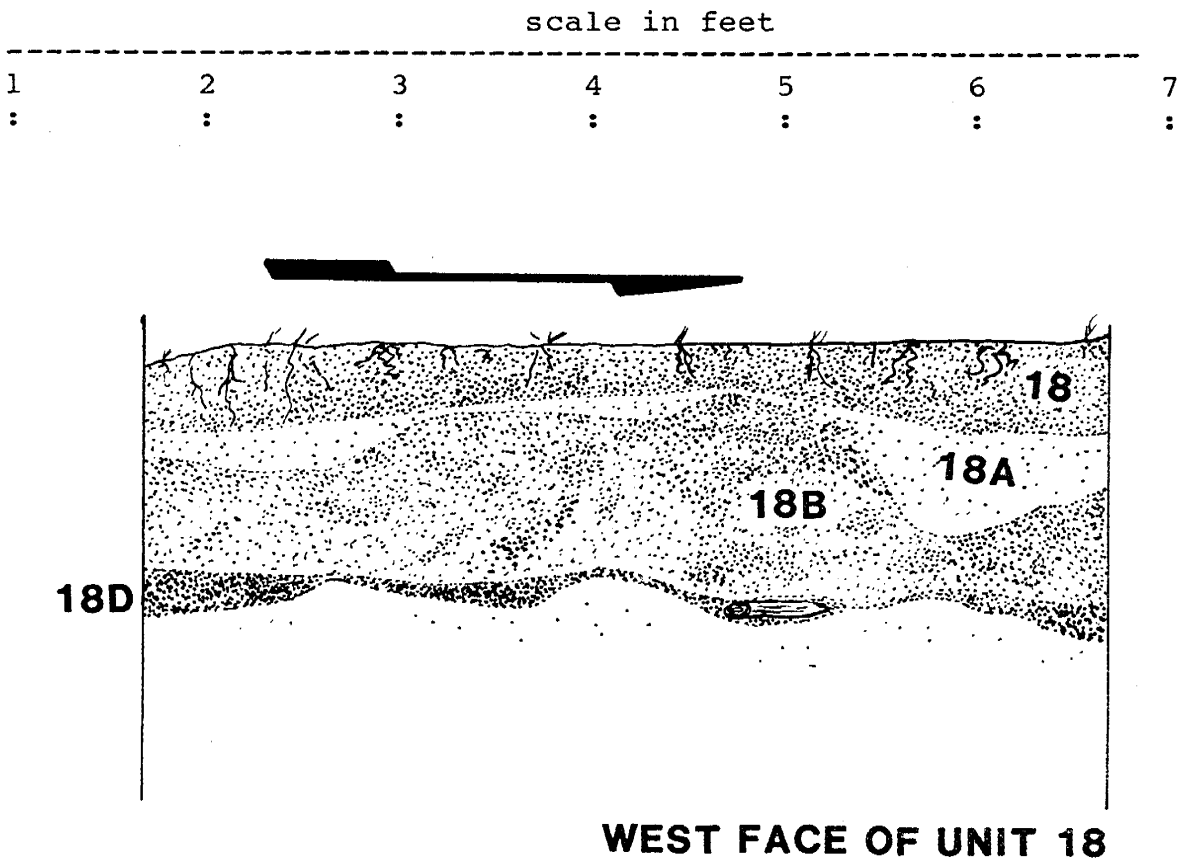
ER18B bottomed partially on an area filled with dense burned trash and partially on orange sand which seemed to be subsoil. The dense trash deposit was numbered ER18D. The orange sand was designated ER18E. It contained no artifacts, but it did contain streaks of natural iron deposits that indicate undisturbed soils.

A shallow linear feature lay on the bottom of the unit along the east face. It was a slightly darker orange than ER18E and it contained a scatter of ash. It was numbered ER18F.

ER18F proved to be ephemeral, with a heavily leached and thus

FIGURE 32
Unit 18

18	Root-filled grey-brown sandy topsoil
18A	Orange sand
18B	Ash, sand, burned debris and topsoil mixed
18C	Soft gray sand lens
18D	Soil mixed with dense trash deposit
18E	Mottled orange and brown soil
18F	Ephemeral linear feature in subsoil



indefinite bottom profile. It was evident in the profiles that ER18D was really simply an extraordinarily trashy lens within ER18B.

Unit #19, 232.5 - 235 N, 250 - 255 E

Unit 19 lay at the southwest corner of the wheat field, a bit north of the young juniper tree. This area is just below the brow of the knoll, on the southeasterly side. The area was in the general vicinity of the stumps of some large trees, suggesting that it probably had not been heavily disturbed either by building or by plowing.

The vegetation in this unit consisted of blackberry, honeysuckle, and small herbaceous plants including edible and tasty wild carrot. The root mat peeled up in a single piece like a rug. Immediately below it was a level of fine sand. This appeared to be an aeolian deposit. The root mat and sand were designated ER19.

Immediately below the sand was a level which looked like old topsoil. It was numbered ER19A. It was hard, as if it had been driven on. It contained no clearly visible features. The top of this level, the interstice between ER19 and ER19A contained many artifacts dating from the nineteenth century. Some showed evidence of burning. Both ER19 and ER19A contained brick fragments.

ER19B was a level established somewhat arbitrarily to permit control over a series of ashy but indefinite lenses interspersed with root molds which began to appear in the lower reaches of ER19A.

ER19B overlay a mottled brown and yellow soil horizon. I did not remove the ashy lenses within ER19B separately because they were small, amorphous, and very generally spread across the eastern end of the unit. They were associated with such nineteenth-century material as redware fragments, and seemed to be the remains of nineteenth-century trash burning. A reworked chert knife, the only complete, finished prehistoric artifact from this entire excavation, was found among these ash lenses. Two pieces of prehistoric pottery also were found in this unit.

However, within the (rather broad) juncture between the bottom of the topsoil and the mottled soil, were other prehistoric objects, chips and fire broken rock. They appeared to be in a disturbed context. This level, ER19C, contained a distinct intrusive root mold, in which were historic sherds.

The root mold, labelled ER19D, was opened first. A recent root intruded into the rootmold.

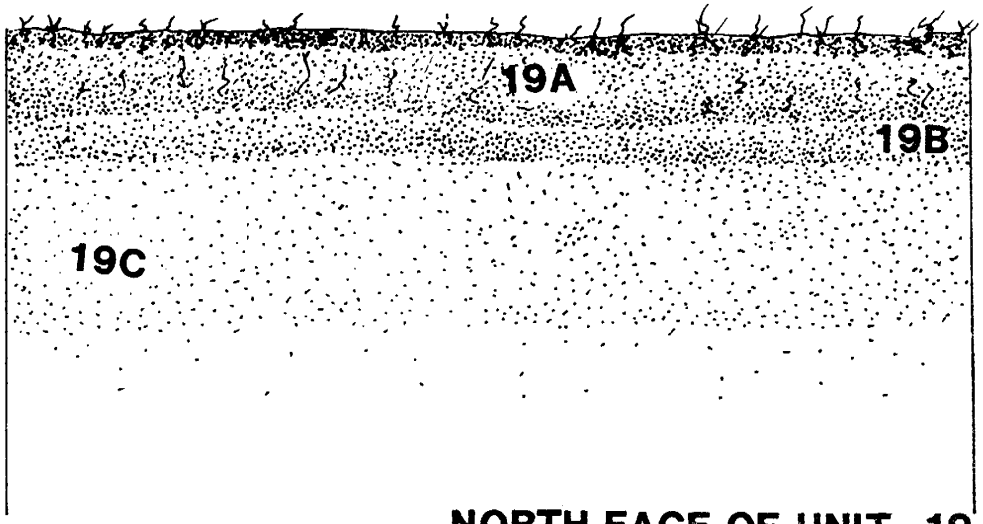
19C contained many prehistoric stone chips, but also was

FIGURE 33
Unit 19

19 Root mat and fine grey soil deposit
19A Grey topsoil
19B Topsoil with ashy grey lenses
19C Mottled orange and brown soil
19D Rootmold of a large stump with a recent root intruding

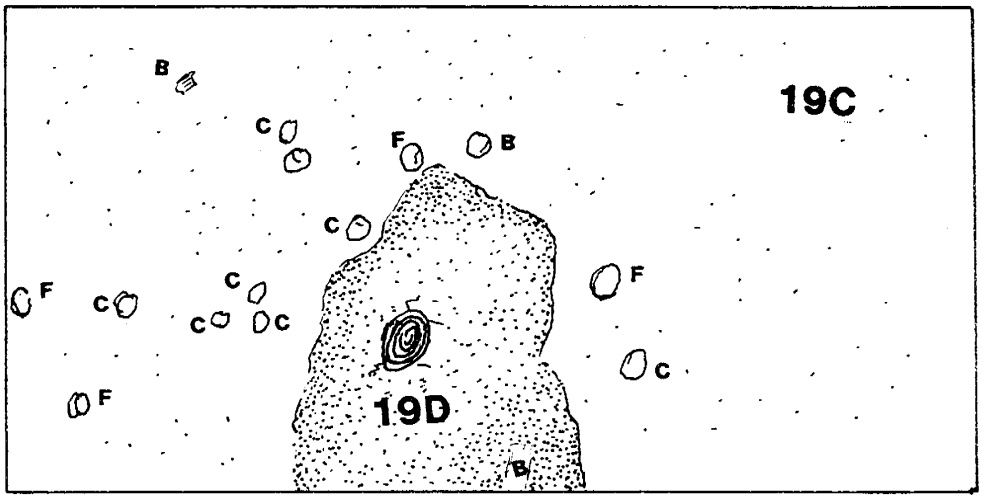
scale in feet

1 2 3 4 5 6 7



NORTH FACE OF UNIT 19

B = BONE C = CHIPS F = FIRE-BROKEN ROCK



PLAN OF UNIT 19 AT TOP OF LEVEL 19C

flecked with apparent brick chips that probably had migrated down from above; a sherd of prehistoric pottery lay at the same depth as a brickbat, and two sherds of white refined earthenware lay near the top of the level.

At the bottom of the mottled soil was the light yellow sand subsoil, which was shovel tested and found to be sterile.

Unit #20: 145 - 150 N, 275 - 277.5 E

The last unit was set as far down the south slope towards the gravel pit as there appeared to be a natural surface. The relatively high density of prehistoric material in unit 19 suggested that there might yet be substantial prehistoric remains on the leeward side of the knoll. A trowel test in this area prior to laying out the unit turned up a fire broken rock and deep topsoil.

The vegetation over this unit consisted of raspberry plants and small herbaceous plants such as cress. Some bare topsoil showed, and there was no root mat. The soil was a loose brown loam, which had been disturbed quite recently by burrowing animals. This was designated ER20. There was little difference between this and ER20A, the marginally firmer brown topsoil below.

Since it appeared to be continuous and featureless, this stratum was excavated as a unit. It extended without visible gradation in color or texture to the yellow sandy subsoil. The subsoil grade roughly parallelled the ground surface. The subsoil was tested with a shovel and found to be sterile.

Artifact description and analysis

The approach used to interpret the artifacts is quantitative, rather than a specific analysis of each deposit. Certain diagnostic groups of artifacts were chosen and examined over the entire site. The groups, described in appendix 3, were plotted and subjected to statistical analysis.

The "surface" component was assumed to contain the casual deposits from the last period of occupation of the site. Some of the surface component may have been disturbed by the destruction of the house. Later use of the site as a trash disposal area contaminated the surface with trash which had nothing to do with the site's period of active occupation. Nevertheless, both the destruction of the house and the later disposal of trash represent evolution in the site's function, and could not be ignored in the overall interpretation.

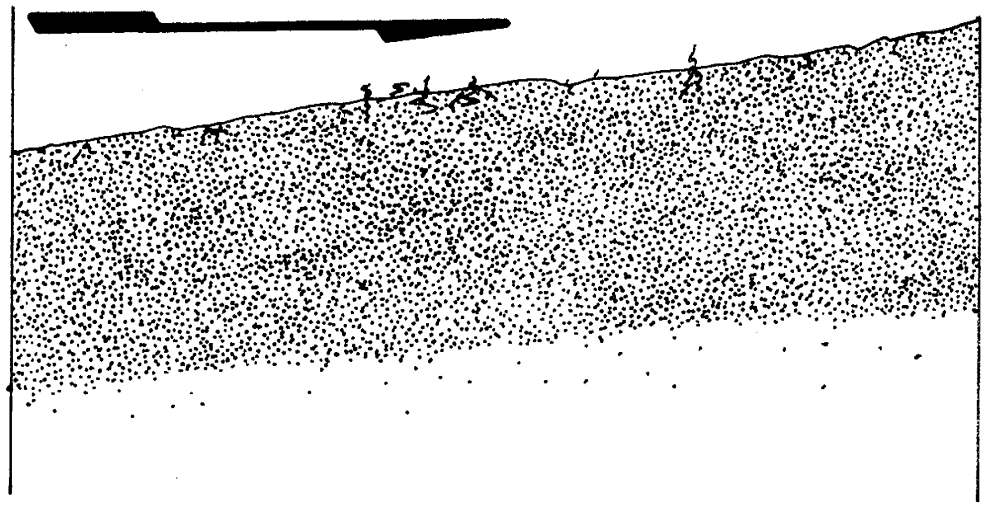
The chi-square test for goodness of fit was applied to three gross categories of artifacts, labelled for convenience kitchen, architecture, and activity. This test was applied separately to the superficial deposits (generally unstratified upper layers) and

FIGURE 34
Unit 20

20 Rich, loose, brown loam
20A Lower level of the same loam

scale in feet

1 2 3 4 5 6 7



WEST FACE OF UNIT 20

to subsurface horizons separately, to see if there were concentrations of artifact density at either level. The test was applied to each level twice: once including all units which contained identified stratified levels, and once excluding the trash disposal area represented by units 7 and 19. In all cases, the chi-square statistic was significant at a level of probability well beyond the 1% level. This indicates that in earlier times represented by lower levels and recent times represented by upper levels, kitchen trash, architectural debris, and remains of non-domestic activities were not spread evenly around the site, but were in fact concentrated.

The locations of these concentrations, and the difference between recent (unstratified) and earlier (stratified) concentrations is assumed to have cultural significance.

Table 3, beginning on page 84, is an analytical tabulation of the artifacts by categories, the basis for the maps and other graphic interpretations that follow.

The bar graph of the kitchen group artifact count (figure 35) at two levels shows that there was a clear difference in the distribution of kitchen trash across the yard, and that this difference changed with time.

In the south part of the yard, earlier kitchen trash was limited to areas within about 50 feet of the house, units 1, 4, and 8, with a concentration in unit 1. More recently, kitchen debris was more evenly spread throughout the yard. A word of caution is in order however; two of the kitchen artifacts in unit 20 are redware, an early type, which fell into the "surface" stratum because unit 20 is for practical purposes unstratified.

The easterly units showed the highest concentration of kitchen artifacts in both earlier and more recent times. The presence of the trash-disposal units, 7 and 19, accounts for a large portion of the concentration. Excluding these units, the concentration of kitchen debris east of the house falls within 50 feet in both periods.

Kitchen debris north of the house decreased in concentration but increased in horizontal spread over time. The appearance of kitchen debris in the lower levels of units 5, 12, and 15 can be explained functionally. Units 5 and 12 lie in or near the conjectured site of the original farm lane which ran to Denny's Road (figure 6), while unit 15 is near the barn and in a trafficway. In these spaces, hard trash would be used as fill. More recent kitchen debris is spread more evenly over the north part of the farmyard, suggesting that this area lost some of its ceremonial function as the activity centers moved.

The westerly units contained very little kitchen debris in

either period. This relative absence may be the result of grading; however, the general absence of material in this part of the yard suggests that the west side of the yard was seldom used for household tasks (figure 37).

The graph suggests that the north and south sides of the house were subjected to the more intensive general use in recent times. Trash incineration took place east of the house, leeward of the prevailing wind from the dwelling and activity areas.

This movement is expressed as well in the map of the movement of weighted centers of the three gross artifact categories, figure 36. The weighted center of the kitchen activity shifted southward over time, reflecting the increased general distribution of kitchen artifacts to the south of the house and the disappearance of concentrations of these artifacts to the north of the house.

The weighted center of the "activity" group shifted toward the northeast over time. This shift may be interpreted to indicate the movement of the farmyard in that direction with the building of the twentieth-century barn to the northeast of the house.

The center of the architecture group shifted southeastward. This movement may represent the difference between earlier construction periods to demolition in recent periods with attendant carelessness about salvage.

Plastic objects, which could have been deposited only during the latest period of the site's history, were plotted and compared against red earthenware, which was popular for kitchen vessels during the nineteenth century (figure 37a). The weighted center of redware deposits is south and east of the center of plastics.

Figure 37b further corroborates the suggestion of shift in domestic activity within the yard over time. Units to the north and south of the house increased in their percentage of kitchen artifacts, while units to the east of the house decreased in the percentage of this component, while units toward the west remained relatively constant.

While these rough analytical techniques suggested movement through time, diagnostic date-sensitive artifact categories confirmed it. Of the architectural debris present in the yard, nails were the most amenable to analysis. The transition from cut to wire nails is a convenient benchmark to distinguish early from late periods. Nails were present in nearly all units, and no distinction was made between levels (figure 38).

Difference-of-proportion tests were run comparing the percentage of wire nails in each unit with the percentage of wire nails in the site at large. At the coarse 25% level of probability, there is a high concentration of wire nails

immediately adjacent to the west of the house. This concentration of nails is the site's clearest evidence for the shift of farmyard functions away from McKee Road. The 25% level of probability was chosen because of a natural break in the computed probabilities, with one group falling in the range of 7% - 22% and the other in the range of 30% - 50%. Considering the generally even distribution of both cut and wire nails, the ≤25% probability representing a chance of no more than one in four that wire nails would be so concentrated, seems reasonable. Moreover, the concentration of wire nails to the east of the house corresponds to the migration of the weighted center of architectural debris.

Again comparing the three coarse groupings across time with a ternary diagram (figure 39), certain shifts in both farmyard use and the locations of farmyard activities become apparent. The ternary diagram compares the percentages of the three gross components of each unit, which contained both buried and superficial artifact-bearing horizons.

Overall, the relative proportion of architectural material decreased over time, while the relative proportion of more generalized activity debris increased. Kitchen debris remained generally constant but clearly split into two clusters.

While these analyses do not provide a clear-cut diagram of the site's changed usage over time, they appear to demonstrate that change did take place, and that such gross analysis is useful, even with a very small sample.

FIGURE 35

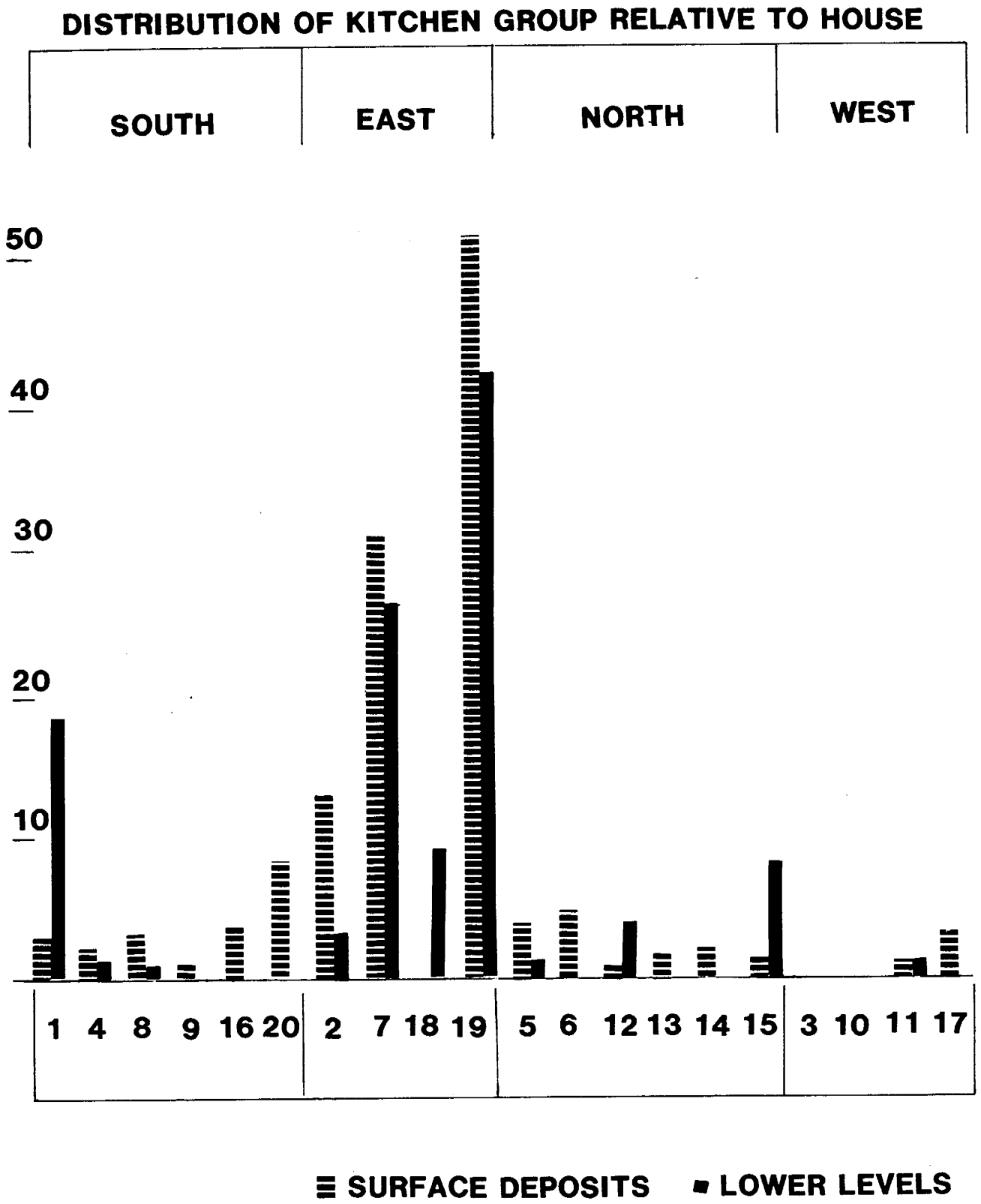
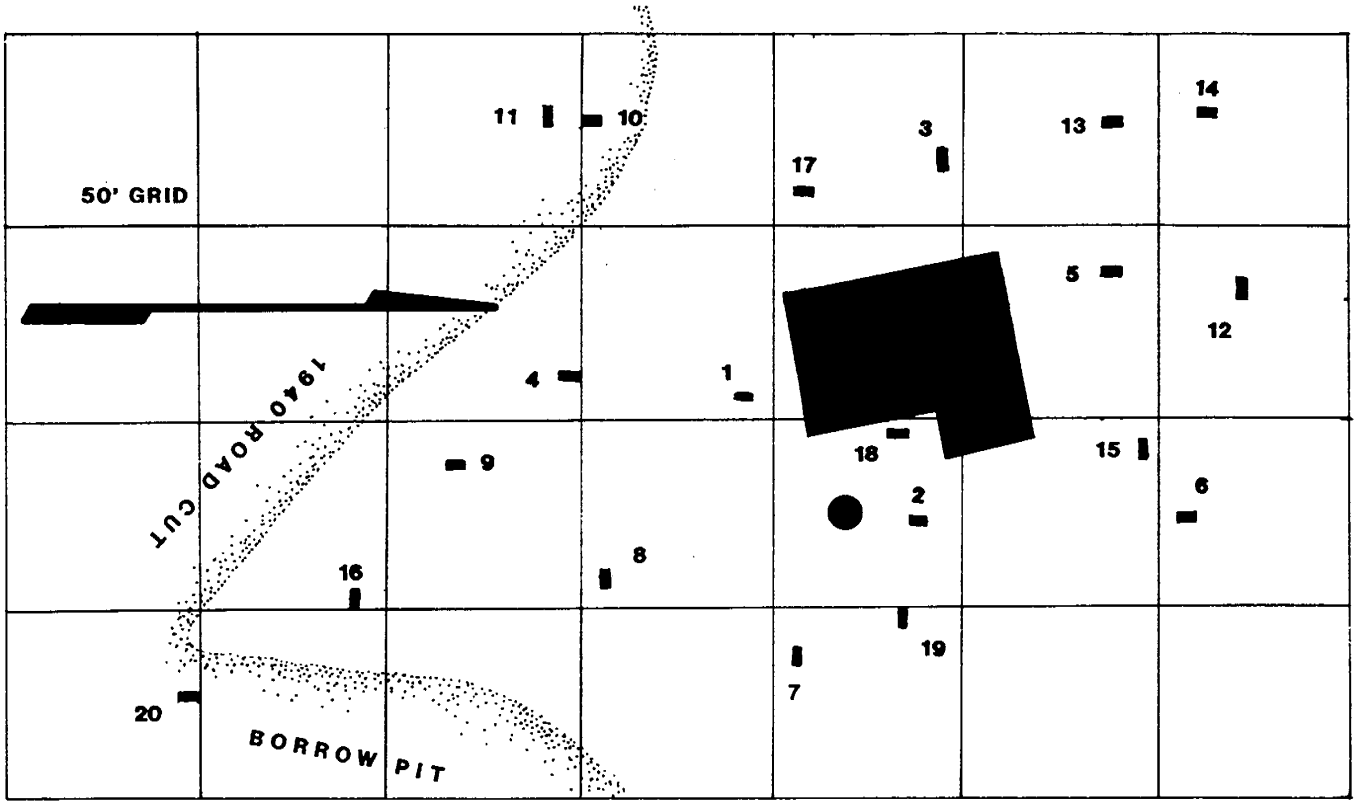
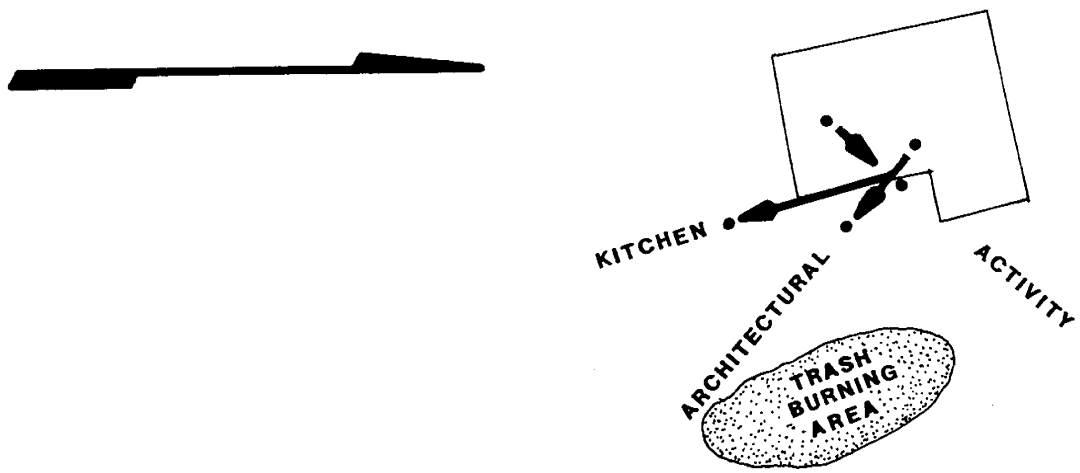

DISTRIBUTION OF KITCHEN GROUP RELATIVE TO HOUSE
SOUTH
EAST
NORTH
WEST
50
40
30
20
10
1 4 8 9 16 20
2 7 18 19
5 6 12 13 14 15
3 10 11 17
SURFACE DEPOSITS
LOWER LEVELS

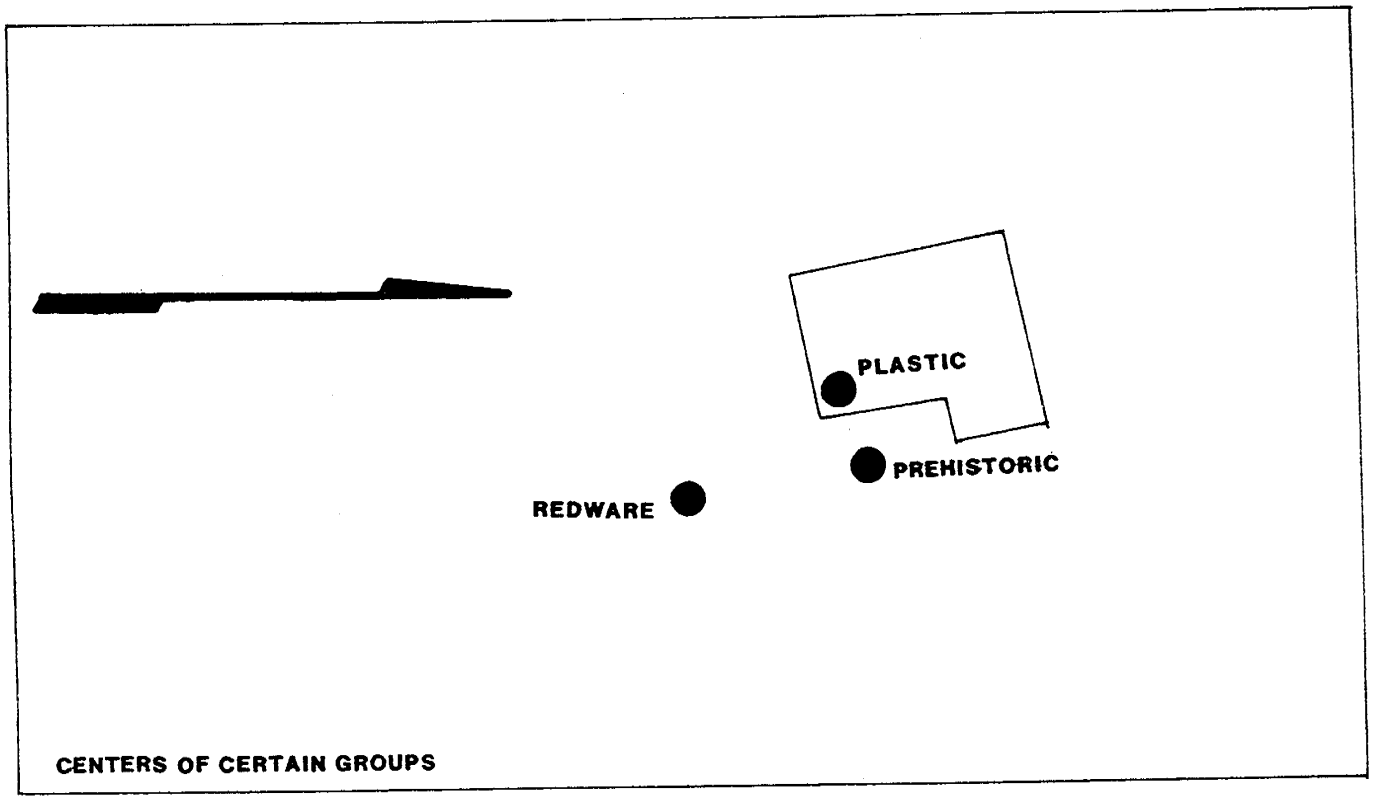
FIGURE 36





MOVEMENT OF WEIGHTED CENTERS OF THE DISTRIBUTION OF THREE ARTIFACT GROUPS

FIGURE 37


PLASTIC
PREHISTORIC
REDWARE
CENTERS OF CERTAIN GROUPS

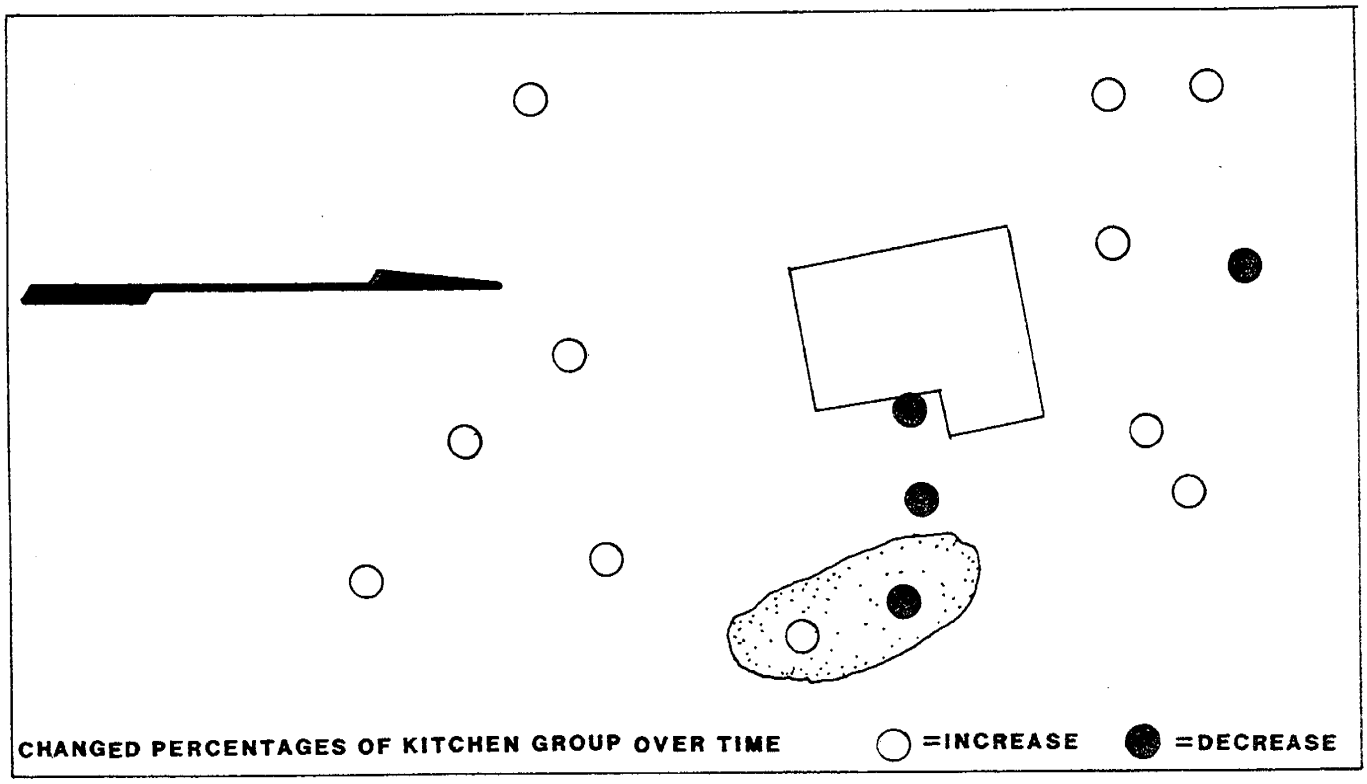
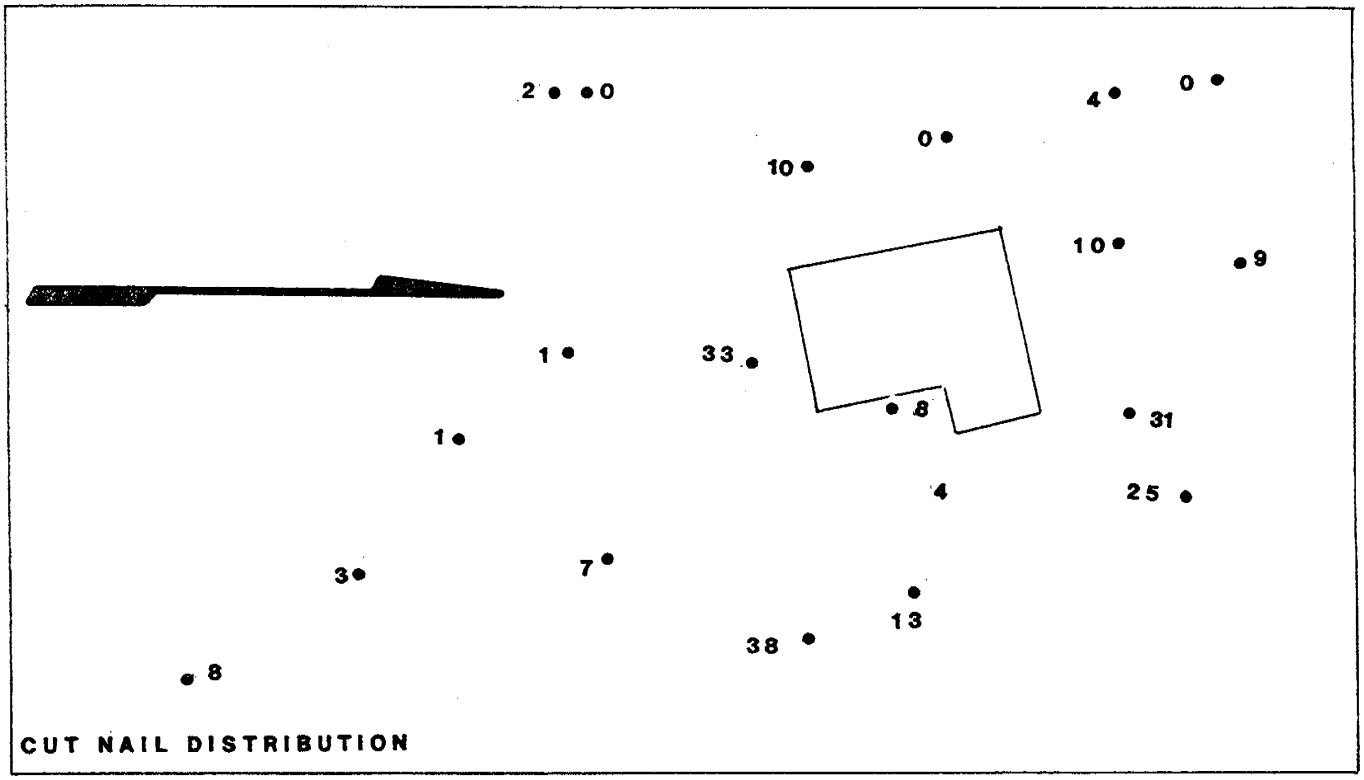

CHANGED PERCENTAGES OF KITCHEN GROUP OVER TIME
=INCREASE
=DECREASE

FIGURE 38


2
0
4
0
0
10
10
9
1
33
8
31
1
4
25
3
7
13
38
8
CUT NAIL DISTRIBUTION

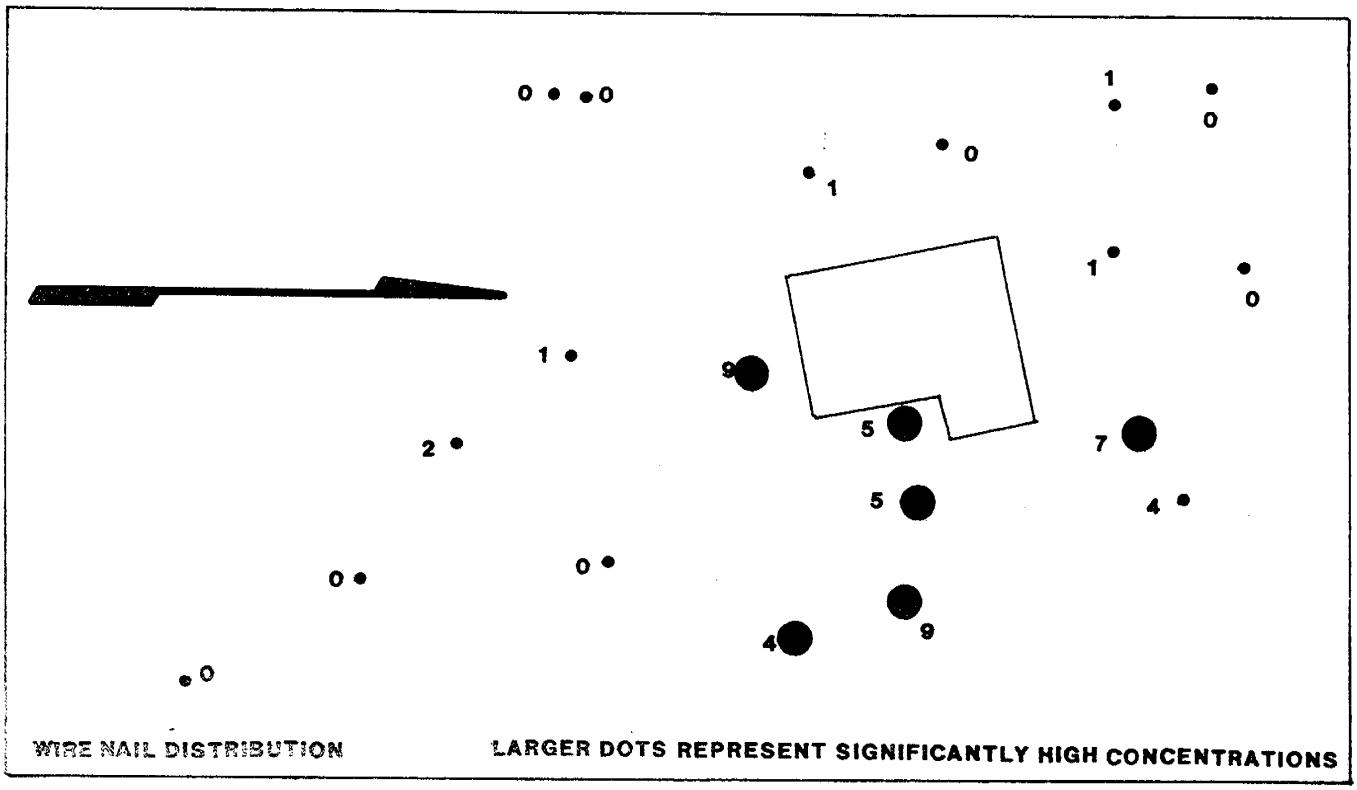
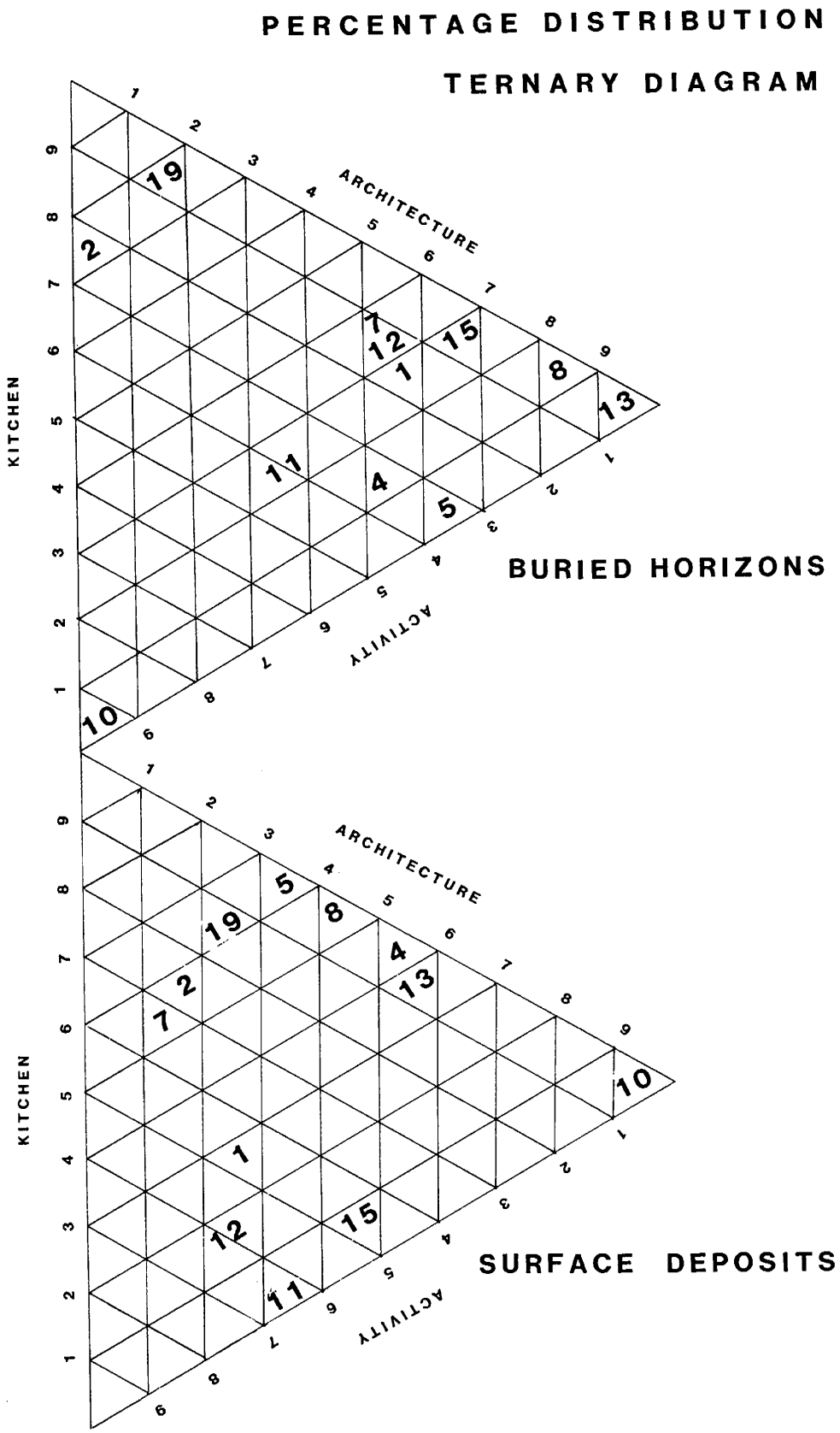

0
0
1
0
0
1
1
0
1
9
5
7
2
5
4
0
0
9
4
0
WIRE NAIL DISTRIBUTION
LARGER DOTS REPRESENT SIGNIFICANTLY HIGH CONCENTRATIONS

FIGURE 39


PERCENTAGE DISTRIBUTION
TERNARY DIAGRAM
ARCHITECTURE
KITCHEN
ACTIVITY
BURIED HORIZONS
ARCHITECTURE
KITCHEN
ACTIVITY
SURFACE DEPOSITS